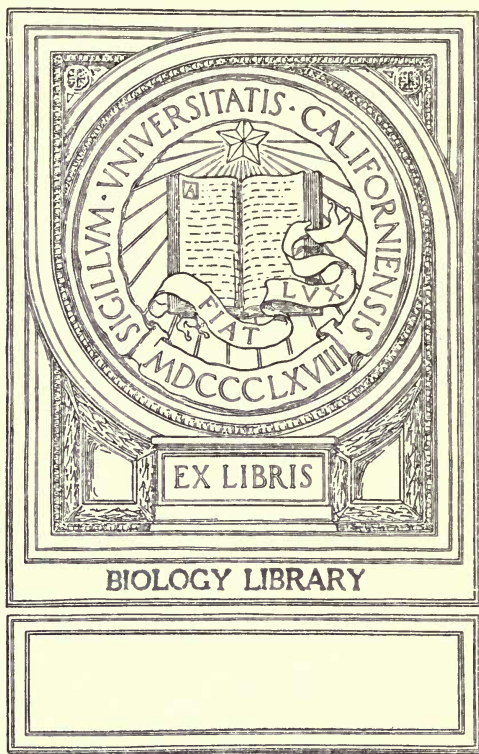


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ENGLAND'S HISTORY
OF

ANIMALS



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THE HISTORY OF THE

AMERICAN PEOPLE

BY JAMES OSGOOD

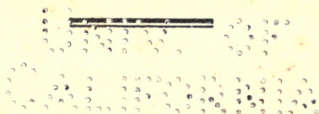
TO VOL
1800

A
NATURAL HISTORY
OF
ANIMALS.

BY JOHN BIGLAND,

Author of "A View of the World,"—"Letters on Universal History," &c.

ILLUSTRATED BY TWELVE COLOURED PLATES, ENGRAVED
FROM ORIGINAL DRAWINGS.



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* A. D. 1328, JOHN GRIGG, of the said district, has deposited in this
***** office the title of a Book, the right whereof he claims as Proprietor, in the words
following, to wit:

"A Natural History of Birds, Fishes, Reptiles, and Insects. By John Bigland,
Author of 'A View of the World'—'Letters on Universal History,' &c. Illus-
trated by twelve coloured plates, engraved mostly from original drawings."

In Conformity to the Act of the Congress of the United States, entitled, "An
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PREFACE.

THE study of Nature is the basis of Religion; and in the primitive ages of the world, previous to the epoch of revelation, mankind had no other guide to direct them to a knowledge of the existence and attributes of the Deity, than the contemplation of his works. These, indeed, exhibited such evident proofs of his power, his wisdom, and his goodness, as were sufficient to convince rational creatures, that a self-existent and infinite Being was the source and origin of all existence. This St. Paul so well understood, that he condemns the Gentiles, because, after having recognised the Supreme Being in the works of the creation, they neglected to worship him, and considers them as inexcusable; "Because," says he, "the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead."

After the decision of so great an authority, the propriety of introducing the study of Natural History into the system of juvenile education, can scarcely be called in question. It is, indeed, of the utmost importance, to exhibit to the youthful mind a view of the wonderful works of God, in order to inspire exalted notions of his essence, his attributes, and his agency, in the formation and dispo-

sition of the universe. This study is also both easy and entertaining, and appears congenial to the nature of man, in every stage of his life. The infant, on his first entrance into life, is naturally led to employ his opening faculties in observing the exterior appearances of the things which he perceives around him; and as soon as he has acquired the use of speech, he desires to be informed of their qualities and uses. When grown to maturity, he sees himself placed in a boundless amphitheatre, filled with an immense variety of objects, which solicit his attention; but, through a want of previous instruction, is often lost and confounded in the magnificence and multiplicity of those scenes which Nature presents to his view.

That some knowledge of the system of Nature is necessary to all ranks of people, is a truth that cannot be contested. The gentleman, the tradesman, the farmer, the mechanic, ought to have such a general acquaintance with this science, as may give him an exalted idea of the Creator of the universe, or some general information of those parts of the animal, vegetable, and mineral kingdoms, which furnish articles of important utility, in regard to food and clothing, manufactures and commerce. Without something of this kind of knowledge, a person must often betray his ignorance, and expose himself to ridicule.

The greatest princes and philosophers have not thought the study of Natural History, unworthy their attention. Solomon, as the scripture informs us, “spake of trees, from the cedar-tree that is in Lebanon, even to the hyssop that springeth out of

the wall: he spake also of beasts, and of fowls, and of creeping things, and of fishes." Aristotle also wrote largely on these subjects: the most magnificent and powerful of the kings of Israel, and the prince of the Grecian philosophers, made the knowledge of Nature one of the principal objects of their pursuit.

The best mode of communicating useful instruction, is to render it entertaining; and youth seldom find any thing agreeable that appears in the form of a task. Systematic arrangements, however advantageous they may be to the professed naturalist, tend more frequently to embarrass than to inform the juvenile student, or the common reader. Various systems have been formed by naturalists, each of which has had its adherents; while by others, it has been exploded as too close or too restrictive, too simple or too complex. The cause of this defect, and the difficulty of forming complete systematic arrangements, is, that Nature has not attached so much importance to these distinctions as they have done, nor made them the uniform rules of her operations. Buffon, the great philosophical painter of Nature, conscious of the brilliant energies of his own expansive mind, affects to soar above what he calls the trammels of system, and despises all artificial arrangements, saying, that "all our families and generations are made by ourselves, and not by Nature, which knows nothing of these distinctions." The system of Linnæus, which is considered by naturalists as the most perfect of all those that have been invented, is a monument of the ingenuity and industry of that great man; but

appears too complex and artificial for common readers, or young students, whose circumstances, occupations, pursuits, and future prospects, do not permit them to make the study of Natural History the business of their lives. His arrangements seem also not sufficiently to coincide with the general ideas entertained on this subject; for although he classes the whale species with the human and quadruped race, merely on account of the conformity of their teeth, and the circumstance of being furnished with pectoral teats, this classification will never prevent the whale from being considered as a fish, rather than a beast, by the generality of mankind. His distinctions also, being chiefly founded on the number of teeth, do not seem sufficiently obvious to be useful to the generality of readers. The classing of the elephant with the armadillo, of the cat and the hedgehog with the bear, and of the horse with the rhinoceros and the common hog, produces such combinations as, we may without hazard assure ourselves, will never be long remembered by young students, amidst the multiplicity of other pursuits.

To disseminate the knowledge of animated nature among all ranks of people, the easiest method, and that which is certainly best adapted to the general ideas of mankind, is, to range the different orders according to their visible resemblance to some well-known animal, which exhibits a characteristic distinction, obvious at the first sight, without burdening the memory with artificial systems, and scientific discriminations.

If this work had been designed for the use of

those who make the knowledge of Natural History the principal object of their pursuit, the Linnæan system would certainly have been adopted and strictly adhered to: but it is calculated for students of a different description; for those who, without having leisure to devote themselves wholly to the study of this science, would not wish to be totally ignorant of the world in which they live. To instruct the youthful mind, in regard to the most important subjects of inquiry in the system of Nature, so far as regards the quadruped race, is the avowed design of this undertaking; and indeed, a volume of so small a size cannot be supposed to be intended for the use of the professed naturalist. Without, therefore, pretending to criticise the works of other writers on this subject, or to depreciate their merit, which in many is conspicuous, it will not be amiss to say something of the manner in which it is here treated.

In the first place, a general view is given of the quadruped part of creation, as being next in rank to man, the masterpiece of the terrestrial world. After this general survey, in proceeding to individual description, the most striking and interesting objects of the animal kingdom are delineated; the creatures which are peculiarly curious in their conformation or habits, and especially those which are most formidable or most beneficial to man, are particularly selected and described. Those of general utility or the greatest commercial importance, and those which frequently occur in conversation or reading, in the relations of travellers, and in the

sacred or classical writings, are considered as the most interesting subjects of investigation.

The arrangement exhibited in the table of contents, appears best adapted to general ideas, and easiest to comprehend and remember; and as the book is designed for the use of both sexes, the greatest care has been taken to avoid a fault with which performances of this kind too often abound. Indecorous expressions, and every thing that has a tendency to vitiate juvenile ideas, have been carefully avoided; and the whole is interspersed with religious and moral reflections. The whole design of the work is, to convey to the juvenile mind, by an agreeable mode of communication, as much important information on the subject of animal history, as can be comprised in a volume of so small a size; and this will, perhaps, be found to be as much, as the generality of young persons will have leisure to attain.

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NATURAL HISTORY OF ANIMALS.

CHAPTER I.

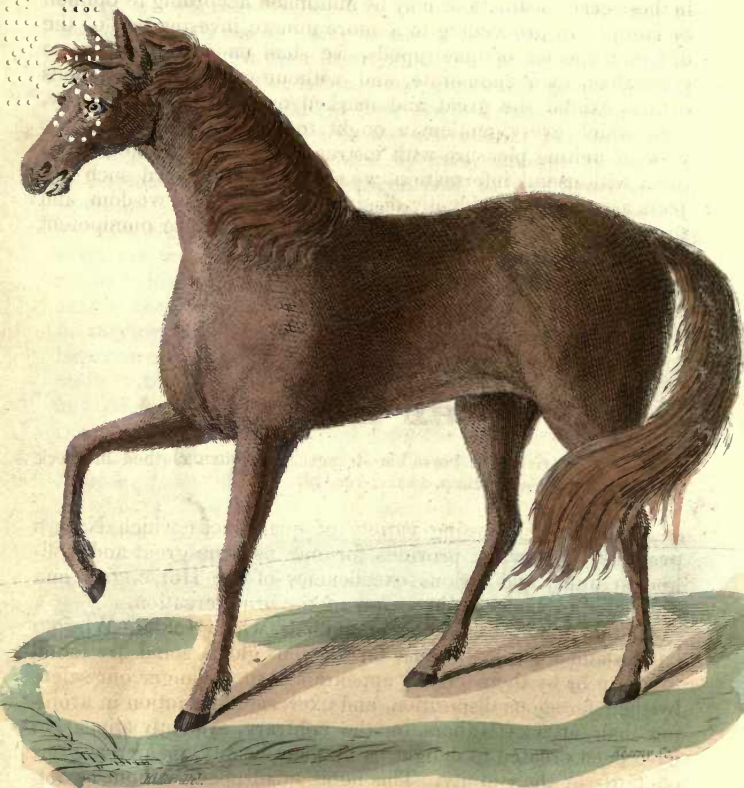
“Out of the ground uprose,
As from his lair, the wild beast, where he wons
In forest wild, in thicket, brake, or den,
Among the trees; in pairs they rose, they walk’d,
The cattle in the fields and meadows green.”—MILTON.

IN taking a survey of the animal kingdom, there is opened to the view an extensive field for observation, in which curiosity may have an ample range, and receive continual gratification without finding its source exhausted. Before entering on the individual description of the different species of quadrupeds, it may be requisite to exhibit them in a general view.

If we descend by regular gradations, from man, the masterpiece of the terrestrial world, we must, for many reasons, assign to the quadruped part of the creation the second rank. Whether we direct our attention to the structure of their bodies, or their various and wonderful instincts, to their ability to render us service, or their power to injure us, we cannot but consider them as prominent and interesting objects of curiosity. The internal conformation in quadrupeds is strikingly analogous to that of man; and the general anatomy of the monkey race bears so great a resemblance to that of the human species, that it requires some skill in physiology to make the discrimination. Their instincts seem also sometimes to approximate to the reasoning faculty, and to exhibit an appearance of something like the human passions. Some of them seem to imitate, or even to rival us, in our most tender affections. What human attachment can exceed that of the dog to his master? He accompanies him with constancy, guards his property with attention and fidelity, and defends his person with courage and zeal. He is eager to obtain his caresses, and docile in obeying his commands. If he has the misfortune to incur his displeasure, he seeks every means to be restored to his favour: he testifies emotion and anxiety at his absence, and is transported with joy at his return. Among mankind friendship cannot be more energetically expressed, but is often accompanied with less sincerity. In a number of other quadrupeds, the operations of instinct are equally remarkable and striking. The mischievous cunning of the

monkey, the provident foresight of the beaver, the sagacity of the elephant, excite our astonishment. What can equal the subtle artifices of predaceous animals, in seeking and catching their prey, or those of the weaker and more timid, in eluding the pursuits of the strong and ferocious? In this, as in all other things, we discover the wisdom of the Creator. Did not the weaker animals use as many means of self-preservation, as the stronger employ for their destruction, the former would soon be exterminated, and the latter would afterwards perish for want of subsistence. Animals, in their original state of wildness and independence, are subject to few alterations; but those which are subdued, and domesticated by man, undergo through his management considerable changes, both in their figure and dispositions. In the horse, the cow, and several other domestic animals, we perceive a number of varieties, some of which, indeed, are the effects of nature, but more of them produced by art or cultivation. The circumstances of soil and climate have also a decided and well-known influence on the animal race, in varying their size, their colour, or their covering. In the hyperborean regions, Nature has furnished the quadruped creation with long and thickly planted hair, but with a lighter and cooler vesture between the tropics; and those which are capable of being transported from the extreme of cold to that of heat, or the contrary, are found upon experiment to assume a dress adapted to the climate, a circumstance which shows the wisdom of Providence, in providing for the necessities of all creatures. On the disposition and character of animals, the influence of climate is very perceptible, and more easily ascertained in regard to the brute creation, than the human species. Man is so much the creature of association, imitation, and habit, and so powerfully influenced by moral causes, as to render it impossible to determine in what degree he is affected, or how far his character is formed by those of a physical nature. External impressions are sensibly felt by every thing that has life, and both rational and irrational beings must in a greater or less degree be subject to their influence. If, however, in man the effects of situation, and other physical circumstances, be difficult to distinguish from those of social institution and moral habits, this difficulty does not exist in a view of the brute creation; and the effects of climate and aliment are unequivocal; for between the tropics the same kind of animals are extremely different from what they are in temperate climates; in the former they are more ferocious and daring, in the latter more timid and mild.

After this general survey, we will endeavour to vary the scene by proceeding to individual description, in which we will find



HORSE

these remarks exemplified, and recalled to the memory. The number of distinct species, in the class of quadrupeds, is usually stated at about two hundred, or two hundred and twenty. Late authors have enumerated two hundred and eighty, and some have even sub-divided them into upwards of four hundred; for in these cases distinctions may be multiplied according to opinion or fancy. In proceeding to a more minute investigation of the different species of quadrupeds, we shall endeavour rather to generalize, than enumerate, and, without entering into tedious details, exhibit the great and marked outlines of their history, with which every gentleman ought to be acquainted. In the view of uniting pleasure with instruction, and agreeable amusement with useful information, we shall bring forward such objects as will most evidently display the power, the wisdom, and the goodness of the great Author of Nature, whose omnipotent word called the universe into existence.



CHAPTER II.

THE HORSE.

“Hast thou given the horse his strength, hast thou clothed his neck with thunder?”—JOB, chap. xxxix. ver. 19.

AMID that interesting variety of quadrupeds which Nature presents to view, or provides for our use, the great and well-known utility and various excellencies of the Horse, give him unrivalled precedency, in a view of the brute creation.

Of the numerous species of animals, which Infinite Wisdom has ordained to inhabit this terraqueous globe, some are found to alarm us by their terrific appearance, to endanger our safety by their ferocious disposition, and exercise our caution in avoiding their attacks; others, on the contrary, evidently appear to have been created to delight us by their beauty, or increase our comforts by their utility. This noble quadruped, without having any of the formidable qualities of the former, possesses all the excellencies of the latter, uniting in his form grandeur of stature, and elegance of symmetry, to gracefulness of motion, and is, above all, estimable for his peculiar and diversified utility. When ranging wild, and without control, he is not ferocious; and in his domestic state he is generous and docile, and, although spirited, yet obedient to rule. Equally adapted to the purposes of business and pleasure, he affords us the most essential services, and contributes to our most healthful amusements. Horses

are now bred in almost all countries; but there are few in which this noble animal is seen in possession of his native freedom, unsubdued by man: it is only in the vast and uncultivated plains of Africa and Arabia, and in some parts of South America, that he is to be found in a state of native independency. In those wild and extensive tracts, wild horses may be seen in droves of five or six hundred, feeding together, while one of the number is always observed to be posted at the outside, and acting the part of a sentinel, in order to give notice of any approaching danger. When any such seems to threaten, he gives the alarm by a loud snort, and the whole herd fly off with amazing rapidity. The wild horses of Arabia are esteemed the most beautiful of the whole species. They are generally of a brown colour, with a black mane and tail of short tufted hair. In size and bone they are, for the most part, inferior to the tame breed, but exceedingly active and swift. The common method of taking them is by snare and pitfalls, formed in the ground. The wild horses, now so numerous in some parts of America, especially in Paraguay, Patagonia, and La Plata, were originally of the Spanish breed, and were carried thither, and turned into the woods, by the first Spanish settlers. The astonishment which the Mexicans, the most polished and intelligent of all the Americans, manifested at the sight of horses, convinced the Spaniards that this animal was totally unknown on that continent, and induced them to carry numbers thither, not only for their immediate use, but also to propagate a breed. Since that time, they have multiplied so much as to range in numerous herds through those extensive countries. They are difficult to take, but if once taken are easily tamed, and soon learn to know their master; and if they be by any means set at liberty, they are easily caught again, not shewing any inclination to return to their former state of wildness—a circumstance which evinces a remarkable tractableness of disposition in this noble and useful animal.

The Horse is so well known, that it is entirely needless to give a particular description of his shape and exterior appearance. It will be sufficient, to exhibit to view the principal distinctions which nature has made in the different breeds of this noble quadruped, through the influence of climate and other accidental circumstances. For this purpose, we shall commence with

THE ARABIAN HORSE.

Of all the people in the world, the Arabians set the greatest value on horses; and almost every Arabian, how poor soever he may be in other respects, possesses at least one horse. They are particularly fond of mares for riding, as they find them to bear hunger and thirst better than horses, besides being less

vicious. The Turks, on the contrary, esteeming horses the most, purchase those which are not kept for stallions. The Arabians are exceedingly careful of the breed of their horses, which, instead of crossing, as is generally practised in other countries, they take particular care to preserve pure and unmixed. They know their generations, with all their alliances and ramifications, and preserve for an amazing length of time, the genealogies of their horses, with as much care as the nobility of other countries do those of their families. The lowest price for a mare, of the first class, is from one hundred to two or three hundred pounds sterling. It is, therefore, no wonder, that they should be sold for exceeding high prices, when carried into foreign and far distant countries. Horses form the principal riches of many of the Arab tribes, who use them both in the chase, and in their plundering expeditions. They never beat them, but always treat them with the utmost kindness. The Arab, his wife, and children, lie in the same apartment with the mare and foal, who, instead of injuring, suffer the children to rest on their bodies and necks, and even seem afraid to move lest they should hurt them.

The fondness and tender attachment, which the Arabs have for their horses, are well illustrated by the following anecdote, related by the Chevalier D'Arvieux in his *Travels in the Desert of Arabia*, and also in *St. Pierre's Studies of Nature*: "The whole stock of a poor Arabian consisted of a beautiful mare, which the French consul, at Said, offered to purchase, with intention to send her to Louis XIV. The Arab, pressed by want, hesitated a long time, but, at length, consented, on condition of receiving a very considerable sum of money, which he named. The consul wrote to France for permission to close the bargain, and having obtained it, sent immediately to the Arab the information. The man, so poor as to possess only a miserable rag, a covering for his body, arrived with his magnificent courser. He dismounted, and looking first at the gold, and then stedfastly at his mare, heaved a deep sigh:—'To whom is it, (he exclaimed) that I am going to yield thee up? To Europeans! who will tie thee close; who will beat thee; who will render thee miserable! Return with me, my beauty, my jewel! and rejoice the hearts of my children!' As he pronounced the last words, he sprang upon her back, and was out of sight almost in a moment."

Arabia seems to have been the parent country of horses, whence they have probably spread into Barbary, and other parts of Africa, which produce a breed that is considered next to the Arabian in swiftness and beauty, although somewhat inferior in

size. From the last mentioned countries they have probably made their way into every part of the old continent.

The Spanish horses are also held in high estimation; they are small but beautiful, extremely swift, and full of spirit. Those of India and China are extremely small and vicious. One of these, brought into this country as a present to her majesty, was little larger than a large mastiff, measuring only nine hands.

Of all the nations of Europe, the English have, during a long time, paid the greatest attention to the improvement of their horses, by the introduction of the most valuable mares and stallions of different kinds, and by a judicious mixture of different breeds. That which is held in the highest estimation, is

THE RACE HORSE.

The breed of English race horses is superior to that of any other country in Europe, or, perhaps, in the world. For a long course they excel those of every other part of the globe, and none can surpass them in swiftness. The celebrated Childers, the property of his grace the Duke of Devonshire, was universally allowed to be the fleetest horse ever bred in the world. He ran repeatedly at Newmarket against the best racers of his time, and was never beaten. He passed over eighty-two feet and a half in a second of time, and has run round the course at Newmarket, which is very nearly four miles, in six minutes and forty seconds—an instance of speed never exhibited by any other quadruped of any species whatever.

THE HUNTER

Is that which particularly shows the successful attention of the English, in the judicious management of their horses, by which they have skilfully combined the swiftness of one race with the strength of others. By this judicious method, they have produced the English hunter; and this breed is indisputably the most useful of any in the world. Their spirit, agility, and perseverance, are qualities which render them extremely valuable, whether for the chase or for travelling; and most of the posting on the great roads, is now carried on by this active and useful race.

Though nature appears to have implanted a benevolent disposition in the horse towards man, yet, that he is not unconscious of injuries, nor devoid of resolution to revenge them, is exemplified in the following incident: A baronet, one of whose hunters had never tired in the longest chase, once encouraged the cruel thought of attempting, completely, to fatigue him. After a long chase, therefore, he dined, and again mounting, rode him furi-

ously among the hills. When brought to the stable, his strength appeared exhausted, and he was scarcely able to walk. The groom, possessed of more feeling than his brutal master, could not refrain from tears at the sight of so noble an animal thus sunk down. The baronet, some time after, entered the stable, and the horse made a furious spring upon him, and, had not the groom interfered, would soon have put it out of his power ever again to misuse his animals.

Hunters are sent over from England to almost every part of the continent, particularly to Russia and Germany. They are sold there for very high prices, as their superiority over all other horses is universally known and acknowledged.

While the beauty, the elegance, the activity, and strength, of the race horse and the hunter, combined with the most wonderful tractableness of disposition, willingness of exertion, and submissive obedience, are excellencies which give to these noble quadrupeds a decided pre-eminence in the animal creation, it must be a subject of regret to the feeling mind, that those valuable qualities should be so frequently abused, and such extraordinary power exhausted in the most useless exertions.

THE BLACK DRAUGHT HORSE.

This breed of horses surpasses in strength all others that any country has produced. The largest of this sort are found in the fens of Lincolnshire. Instances have been known, of a single horse of this breed drawing, for a short distance, the weight of three tons. A great part of the British cavalry are mounted on horses of this kind: in some regiments, those of a lighter make are used. The old black coach-horse is now almost universally set aside; instead of which, a more active and lighter kind is used in our carriages. It is pleasing to observe, that the pretension to mend Nature's work by docking the tail, a practice offensive to humanity, and replete with absurdity, begins now to be unfashionable, while we must still regret the continuance of the custom of forming it by nicking, which is equally cruel and useless, as it gives to the horse no real, but only a fancied ornament.

The ponies of Wales, and those bred in the highlands of Scotland, seem to be an original and unmixed race. Both kinds are much esteemed for the neatness of their shapes, and the agility of their motion, but still more for their vigour in supporting fatigue, as well as for being exceedingly sure-footed in difficult roads; qualities well adapted to the mountainous tracts of which they are natives.

It is very probable, that the horse was not originally a native of this island; but at what time, or from what part of the con-

continent, this noble quadruped was first introduced, history does not inform us. We learn, however, from the Commentaries of Julius Cæsar, that horses were plentiful in this country at the time of his invasion; and although that celebrated commander has not given us any description of their kind and shape, his narrative affords a sufficient proof of their activity and discipline, when used in the war-chariots of the Britons.

We cannot dismiss this article, without making some reflections on the wisdom and goodness of Divine Providence, in creating an animal of such singular utility to the human species. If we rightly consider the difficulties of our situation, if the goodness of Providence had not provided us the assistance of the horse, we shall find that the obstacles we should in many cases have met with, would have been almost insurmountable. The want of horses was one of the principal causes which rendered the natives of the new world so much inferior to their European invaders; and the decided superiority of the Spaniards over the Mexicans, was owing, almost, as much to their horses as to their fire-arms. Indeed, the want of horses would always have operated as a check to the advancement of the American nations in the process of civilization, and have always kept them, with respect to the arts, both of war and peace, in a state of inferiority to the Europeans. Next to the want of iron, the want of horses is, perhaps, one of the greatest physical obstacles to the advancement of the arts of civilized life. We ought, therefore, to regard the Horse as an inestimable gift of the bountiful Creator, and treat him, not with neglect, nor with cruelty, but with attention and kindness, not only while he is able to perform our work, or be conducive to our pleasures, but even after age or accident may have disqualified him for further service. The exercise of wanton cruelty upon any of God's creatures, is an act of impiety towards their Creator; but the ill treatment of such as are given us for the purpose of promoting our conveniency and comfort, bears the additional stamp of foul ingratitude to the all-bountiful Donor.

CHAPTER III.

THE ASS.

“Who hath sent out the wild ass free, or who hath loosed the bands of the wild ass? Whose house I have made the wilderness, and the barren land his dwellings. He scorneth the multitude of the city, neither regardeth he the crying of the driver. The range of the mountains is his pasture, and he searcheth after every green thing.”—JOB, xxxix.

WE will now turn our attention to an animal of a somewhat plainer form, and less distinguished rank in the order of quadrupeds, and of much less value in the estimation of mankind, than the horse, although, in many respects, but little inferior in utility. The Ass was, according to the most probable conjecture, as well as the horse, originally a native of Arabia and the adjacent countries; and the supposition is not a little corroborated by the congeniality of a warm climate to its constitution. Aristotle says, that, in his time, there were no asses in Scythia, nor in the adjoining countries, nor even in Gaul (France,) which he calls a cold country. He further assures us, that a cold climate always causes them to degenerate, and this opinion is confirmed by the experience of modern times; for the asses, bred in this country, are very far inferior in size, beauty, strength, and activity, to those of Spain, and other warm countries. The deserts of Africa, and some of the islands of the Archipelago, contain large herds of wild asses, which run with such swiftness, that the fleetest horses are scarcely equal to the pursuit; and they are hunted for their flesh, which, by the natives, is esteemed excellent food. The flesh of the tame ass, however, is coarser and more disagreeable than that of the horse; but its milk is esteemed an excellent remedy for many disorders, especially the consumption. In their native state, asses live in separate herds, consisting of a chief, and several mares and colts, sometimes to the number of twenty. They are very fearful and vigilant. A male takes on him the care of the herd, and is always on the watch. If they see a hunter, who, by creeping along the ground, has got near them, the sentinel, apprehensive of danger, takes a great circuit, and goes round and round him. As soon as the animal is satisfied, he rejoins the herd, which sets off with great precipitation. Their senses of hearing and smelling are most exquisite, so that they cannot be approached without great difficulty. The food of the wild asses is the saltiest plants of the desert, as the kali and chenopodium; and for drink, they even prefer salt water to fresh.

Asses were not, any more than horses, originally found in

America, although the climate, in some parts of that continent, is as congenial to their nature as that of Asia or Africa. Those which the Spaniards carried thither from Europe have greatly multiplied, and, in some parts, run wild, and are taken in snares, like the wild horses. The manner of hunting the wild asses, in Quito, is this: A number of Spaniards, or Creoles, on horseback, attended by Indians on foot, form a large circle, in order to drive them into a narrow compass. Then, riding at full speed, they throw a noose over them, and having secured them with cords, leave them until the chase be over, which sometimes lasts three or four days.—These asses have all the swiftness of horses, and neither declivities nor precipices will stop their flight. When attacked, they defend themselves by kicking and biting, without ever slackening their pace. From this description of the ass-chase, given by a celebrated Spanish writer, it seems that hunting the wild horses and asses, in South America, must afford better pastime to a sportsman, than hunting the hare or the fox in Europe.

It is very remarkable, that the wild asses, when taken, after carrying their first load, lose their dangerous ferocity, and soon contract the stupid look and dullness which we observe in the rest of the species. It is also observable, that they will not suffer a horse to live among them. If a horse happens to stray into a place where a herd of them is grazing, they all fall upon him, and bite and kick him to death.

Even in the tame state, the ass will occasionally manifest great courage, and even fierceness. Mr. Pennant tells us, that he was witness, at *les combats des animaux*, the theatre, or bear-garden of Paris, to an extraordinary instance of spirit and prowess in a tame ass, in a fight with a dog. The latter could never seize on the long-eared beast, which sometimes caught the dog in his mouth, and sometimes threw him under his knees, and kneeled on him, until the dog at length fairly gave up the contest.

History informs us, that there were no asses in England, in the reign of Queen Elizabeth, so that their introduction into this country is of recent date. In Persia, there are two sorts of asses; one slow and heavy, used for carrying burdens, the other elegant in shape, and alert in motion, and kept for the saddle. Some of these are sold as high as forty or fifty pounds. Of all the countries of Europe, Spain possesses the best breed of asses: some of them are from fifteen to sixteen hands high; and they have been known to sell for a hundred guineas each, and upwards.

But the asses of Egypt and Arabia excel even those of Spain, in the gracefulness of their movements, and the nobleness of their carriage. Their foot is sure, their step light, and their paces

quick, brisk, and easy. They are used for riding by the most opulent of the inhabitants, and even ladies of the highest rank.

When the rider alights, he has no occasion to fasten his ass; he merely pulls the rein of the bridle tight, and passes it over a ring on the fore-part of the saddle: this confines the animal's head, and is sufficient to make him remain patiently in his place.

Of an animal so well known as the ass, a particular description is unnecessary. Every one is acquainted with his unparalleled patience, perseverance, and gentleness. He is more sluggish and untractable, but stronger in proportion to his size, than the horse, and liable to fewer diseases; and of all the different kinds of quadrupeds, the least infested with lice, or any other vermin. The ass is kept at a very moderate expense, and contents himself with the coarsest herbage; but is particularly fond of plantain. He is, however, extremely nice in the choice of his water, and will drink only at the clearest stream. He is much afraid of wetting his feet, and will, even when loaded, turn aside to avoid the dirty parts of the road. He sleeps less than the horse, and never lies down for that purpose, except when extremely fatigued. He is three or four years in coming to perfection, and lives to the age of twenty or twenty-five years. The she-ass goes eleven months with young. The skin of the ass is valuable, and is converted to different purposes; as to cover drums, and sometimes to make shoes, as also a thick kind of parchment, useful for pocket-books. Of the ass's skin, the Orientals make the sagri, which we call shagreen.

From this view, we shall probably conceive a higher opinion of the utility and importance of the ass, than we have generally been accustomed to form. We readily perceive, that if he be too often degraded into the most neglected of domestic animals, it is not for any deficiency in useful and valuable qualifications, but merely through the caprice of those who are not able to appreciate his worth. The ass was held in high estimation by the Israelites; and the forty sons of Abdon, judge, or chief magistrate of Israel, riding on asses, is mentioned in the scripture as a mark of high distinction, and a display of superior grandeur. These ancients seem to have known this noble, although unjustly degraded quadruped, better than we do at the present day. Their judgment was, in this respect, better, and their taste certainly more refined, than that of those barbarians among us, who beat, abuse, and treat him with all manner of ill-usage, merely because he is an ass, without considering how much we should esteem his excellent and useful qualifications, and how glad we should be of his services, if the Creator, in the exuberance of his bounty, had not given us the horse. Let these considerations

excite in our minds a sentiment of compassion and benevolence towards this inoffensive and useful animal.

The Mule is an exceedingly hardy and useful animal, but not a distinct species, being the offspring of the horse and the ass. This quadruped is remarkably healthy, and lives above thirty years. In Spain, persons of the first quality are frequently drawn by mules, which are held in such estimation, that fifty or sixty pounds is a common price for one of the best. This is not surprising, when their utility in mountainous countries is well considered ; for they are, beyond comparison, more sure-footed than horses, and a person may travel with them in perfect security in roads, where, to venture on horseback, would bring inevitable destruction. Their manner of descending the precipices of the Alps, and the mountains of Spanish America, is extremely singular. In these difficult and dangerous passages, the road frequently lies between perpendicular or overhanging rocks on one side, and frightful precipices on the other, from which, to look down into the immense abyss below, is sufficient to strike the traveller with terror and stupefaction ; and the narrow path, winding along the side of the mountains, is in many places interrupted with steep declivities of several hundred yards. These, no horses whatever, can descend : mules are the only beasts of burthen that are equal to the task. When they arrive at the brink of one of those almost perpendicular descents, they stop short without any check from the rein, and continue some time immoveable, seeming to ruminate on the danger before them, trembling, snorting, and attentively viewing the road. Having thus prepared themselves for the descent, they place their fore-feet in a posture adapted to prevent a too great precipitancy, and put their hind-feet together, drawing them a little forward. In this attitude they slide down with great swiftness and wonderful steadiness, like an experienced skater balancing himself upon the ice. But in this dangerous moment, the rider must do nothing but endeavour to keep his seat firm upon the saddle, and trust his safety entirely to the mule ; for the least check of the rein, or the least motion, would be sufficient to disorder the equilibrium, in which case both must unavoidably be dashed to pieces. Some mules, after having been much accustomed to those dangerous journies, acquire a kind of reputation for their safety and dexterity, which very much enhances their value.

As there is only another animal of the horse kind, we shall conclude this chapter with a short description of it. The animals of this tribe are, by naturalists, reckoned only three in number, the mule being not a distinct species, but an heterogeneous production. Of these three, the horse is the most

THE ZEBRA

THE ZEBRA



Rider Del.

Eng. Sc.

ZEBRA

stately and spirited, the ass the most patient, and the zebra the most beautiful, although the wildest quadruped that nature has produced.

THE ZEBRA,

In shape, has a resemblance to the mule ; for it is less than the horse, and larger than the ass ; but it is chiefly prized for the exquisite beauty of its skin, the smoothness of which nothing can surpass. Nor can any thing exceed the beautiful regularity of its colours, which in the male are white and brown, and in the female white and black, ranged in alternate stripes over the whole body, in a style so beautiful and ornamental, that it might, at the first sight, seem the effect of the most exquisite art, rather than the genuine production of nature. The head is adorned with beautiful and regular stripes, which converge into a central point in the forehead : the neck is ornamented in the same manner, with fine rings which surround it : the thighs, legs, and even the tail, are beautified in the same style of elegance ; and every part is equally decorated. What is particularly remarkable in the colouring of the zebra is, that the stripes, which constitute its peculiar ornament, are disposed with such exactness of distance, that the most consummate artist could not draw lines with more perfect regularity. It seems as if, in the adorning of this extraordinary animal, the Creator had given the command to Nature, to display her utmost skill, and in the formation of its stripes, to bid defiance to the line and compass.

Such is the beauty of the zebra ; but it has hitherto been esteemed absolutely untameable. It must, however, be confessed, that no effectual method has yet been adopted for that purpose. Resembling the horse in its form, as well as its manner of living, it might seem, that it possesses a similitude of nature ; and some naturalists suppose, that with proper management it might be converted to the same uses. This opinion, however, is but ill supported by experience ; for those that have been brought to this country, have discovered a degree of viciousness, that has rendered it unsafe to approach them. The zebra, which was long kept in the royal menagerie, in France, was exceedingly wild at its arrival, and was never completely tamed. He was, indeed, broken for the saddle, but his untractableness rendered great precaution necessary ; and two men were obliged to hold the bridle while another was riding him. Some suppose, that if this animal were completely domesticated, and a tame breed produced, it might then be brought under the same management as the horse. A beautiful male zebra, at Exeter-change, London, which was afterwards burnt to death, by the mischievous act of a monkey setting fire to the straw on which he lay, appeared to

have entirely lost his native wildness, and was so gentle as to suffer a child of six years old to sit quietly on his back, without exhibiting the least sign of displeasure. He was familiar even with strangers, and received those kind of caresses, that are usually given to the horse, with evident satisfaction. The one, however, that was some years ago kept at Kew, seemed of a savage and fierce nature. No one dared venture to approach it, except the person who was accustomed to feed it. For, whatever speculation may imagine, experience shows this animal to be of a very different disposition from both the wild horse and the wild ass. Both these, when once taken, are easily tamed, and become tractable, which has never yet been the case with the zebra.

This animal has, by many naturalists, been erroneously confounded with the wild ass. There exists, indeed, an elegant breed of wild asses in some parts of the Levant, and in the northern countries of Africa, which is much more beautiful than the common ass, and which, like the finest breed of horses, originated from Arabia. But the zebra is a very different animal from these, and inhabits a different climate. It exists neither in Europe, Asia, nor America, nor even in the northern parts of Africa, and is only found in the southern regions of the last-mentioned quarter of the globe, from Abyssinia to the Cape of Good Hope, and from Mosambique to Congo. As the ancients were unacquainted with that part of the world, it is evident that the zebra cannot be the species of wild ass, which they well knew by the name of the *Onagrus*. The Dutch, of the Cape colony, have employed every means to subdue and tame the zebra, without success. Whole herds of these animals are sometimes seen feeding; but they are exceedingly difficult to take, on account of their vigilance and extraordinary swiftness. We have been somewhat prolix in the description of this singularly beautiful quadruped, as it constitutes a striking object in the animal creation, and is esteemed a present fit to be made to the greatest prince. It seems, that the Almighty Being has been willing to display to our eyes the exuberance of his power, in bestowing so great a profusion of beauty on the animal inhabitants of the desert, as well as so remarkable an adaptation of qualities on those more particularly designed for the service of man.

CHAPTER IV.

THE RUMINATING ANIMALS.

“The strong, laborious Ox, of honest front.”—THOMSON.

THE subject of the present chapter is, perhaps, the most interesting that is furnished by the whole system of animated nature. A very little reflection will suffice to show, that those animals, commonly called ruminating, of which the ox, sheep, and goat kind, are the principal, constitute, so far as considered in relation to man, the most important and intrinsically valuable part of the brute creation. If, indeed, indispensable necessity alone were made the criterion of utility and value, the ox and the sheep would claim a superiority even over that noble animal, the horse; for the former, nourishing us with their milk, sustaining us with their flesh, and clothing us with their fleeces, are objects of the utmost importance to us, and absolutely necessary to our well-being, if not to our existence; while the latter, notwithstanding his extensive and universally acknowledged utility, might be left out of the system of animal creation with less detriment to the human species, than would ensue from the omission, or extinction of the ox and the sheep. Ought we not, then, to admire and adore the infinite goodness of Him, who, by creating for our use both the one and the other, has so kindly considered our wants, and provided for their supply; and consulted not only our necessities, but also our convenience?

The various animals which ruminate, or chew the cud, living wholly on vegetables, have no inducement to make war on any other species; and being confined to grain and herbage for their nourishment, their stomachs and intestines have received from nature a conformation which enables them to receive a large quantity of food: for this purpose, they are furnished with four stomachs. The food, after mastication, descends into the first of these, and after remaining there some time, is forced up again into the mouth, where it undergoes a second chewing. After this, it passes into the second stomach, and thence descends through the various convolutions of the intestines. Here, again, we must admire the wisdom of the Creator, in thus giving to these animals an interior conformation which enables them to receive large quantities of aliment, and to retain it in the stomach a length of time, sufficient for the extraction of such a quantity of nutritious matter as is necessary for their support.

Of the different animals of this class, we shall, in the first place, describe

THE OX KIND.

Among the various quadrupeds with which the earth abounds, as none is more necessary to the existence of the human species than the Cow, so, likewise, none appears to be more extensively propagated ; for it is found to exist from the polar circles to the equator, although it appears liable to greater changes from the difference of pasture and climate than most other animals ; and in no other can there be found a greater variety of kinds, arising from the diversity of these circumstances. In every part of the world the cow is found large or small, in proportion to the quantity and quality of its food. Our English pastures seem admirably suited to the nature of this quadruped ; and there is no part of Europe where it grows to a larger size, affords a greater quantity of milk, or fattens in less time. The age of the cow is discoverable by its horns. At the age of four years, a ring is formed towards the root, and every succeeding year adds another. Thus its age may be exactly known, until it grows very old, when the rings grow closer together, and appear less distinct.

In Scotland there are two sorts of cows, different from each other, and from those of the southern parts of the island. Those of the county of Galloway are without horns, and generally of a brown colour, but often mixed with black, and sometimes entirely black. Large droves of these are brought into the southern parts of the kingdom, where they soon fatten.

The cattle of the Highlands are very small, and mostly black, with fine white sharp horns, and hair thick like fur. Large droves of these are likewise brought into England. They are greatly esteemed for the excellence of their beef, as well as for the facility with which they fatten.

In Lord Tankerville's park, at Chillingham, near Berwick-upon-Tweed, there is yet left a breed of wild cattle, probably the only remains of the true breed of that species, at present to be found in this kingdom. Their colour is invariably white, with the muzzle black, and the whole inside of the ear, and about one-third part of the outside, from the hip downwards, red. Their horns are white, with black tips, and bent downwards.

At the first appearance of any person near them, they set off in full gallop, and at the distance of two or three hundred yards, wheel round, and come boldly up again, tossing their heads in a menacing manner. On a sudden they make a full stop, at the distance of forty or fifty yards, and look wildly at the object of their surprise ; but on the least motion, they all gallop off again with equal speed, but not to the same distance, forming a smaller

circle ; and again returning, with a bolder and more threatening aspect than before, they approach much nearer, probably within thirty yards, when they make another stand, and again gallop off. This they do several times, shortening their distance, till they come within a few yards, when it is generally thought prudent to leave them, as, if they were further provoked, they would probably in a few turns more make an attack.

It was formerly a practice, occasionally to hunt a bull from among this herd ; of which notice being given, the inhabitants of the neighbourhood assembled, sometimes to the number of a hundred horsemen, and four or five hundred foot, all armed with guns and other weapons. But from the number of accidents which happened, this dangerous mode has been little practised of late years, the park-keeper alone generally killing them with a rifle-gun at one shot.

When the cows of this herd calve, they hide their young in some sequestered place, and go to suckle them two or three times a day. The calves, if any person comes near them, clap their heads close to the ground, and lie like a hare in form.—This seems a proof of the wildness of their nature ; of which, the following instance is likewise given : Dr. Fuller, author of the History of Berwick, found a calf hidden by its mother, only two days old, very lean and weak. On his stroking its head, it got up, pawed two or three times like an old bull, bellowed very loud, went back a few steps, and bolted at his legs with all its force ; bit, then began to paw again, bellowed, stepped back, and bolted as before. But being aware of its intentions, he moved aside, it missed its aim, fell, and was so very weak, that, though it made several efforts, it was not able to rise. It, however, had done enough—the whole herd was alarmed, and coming to its rescue, obliged him to retire.

The size of horned cattle, in general, as well as the quantity of milk, butter, and cheese, they produce, depend in a very great degree on the nature of their pasturage. In barren countries, they are always of inferior bulk, and the largest breed will there soon degenerate, and become small. The differences arising from this circumstance are exemplified in many parts, even of this narrow island ; and, throughout the world, are confirmed by universal observation. In the country of the Elut Tartars, where the pastures are remarkably luxuriant, the horned cattle are said to grow to so large a size, that a man must be tall that can reach the top of their shoulders.

The quantity of milk and butter, afforded by the cow, is increased or diminished by a variety of circumstances, although it be affected by none more than the difference of its pasture. Some cows give only six, while others yield ten, fifteen, or even

twenty quarts of milk, in one day ; some are even said to have afforded thirty quarts. From the milk of some cows, twelve or fourteen pounds of butter have been produced in one week. The quantity, however, as well as the quality of these productions of the cow, depend very much on the greater or less advancement of the period of gestation, which is nine months. The life of the cow extends to about fifteen years.

Formerly the ox was, of all quadrupeds, accounted the most proper for the draught or the plough. Before our high-ways were so well repaired, and so many turnpike-roads made in every part of the country, he was certainly better adapted to the draught than the horse ; but in the present state of the roads, the case is altered, and horses are found much more expeditious. The use of oxen for the plough is also nearly laid aside. This change arises from a similar reason—the superior speed of horses, which the advanced price of labour renders at this day an object of considerable importance. In the reign of Queen Elizabeth, horses were so scarce, that no more than two thousand could be procured to mount the cavalry of this kingdom. At the present time, the numerous vehicles of all kinds, seen on the roads and in the streets, display such a multitude of horses, as must appear astonishing. Ancient Rome, when mistress of the world, and the centre of luxury beyond all example, did not, perhaps, contain so many horses as might now be found either in Paris or London, although there is reason to believe, that the imperial city was once equal to both of them together, in respect of population, and perhaps also of wealth ; and it is almost beyond a doubt, that England now contains a far greater number than could, during many ages, be found in all Europe. How far the prodigious increase of the number of these truly useful and noble animals is eligible in a political view, it is difficult to determine. In those cases, the complexity of circumstances is so great as to require extensive information, as well as accurate calculation, before the truth can be ascertained, and the balance justly estimated. It is, however, evident, that the multiplication of horses has a certain tendency to the diminution of population, by lessening the quantity, and enhancing the price, of the provisions necessary for the support of the human species. This is easy to comprehend, by supposing a certain number of men and horses, sufficient to consume the whole produce of any particular district, confined within its precincts, and deprived of all supplies from other quarters. In such a case, if an additional number of horses were introduced, the country would then be overstocked, and a part, either of the animal, or the human species, must fail for want of sustenance. The ox, after serving man by his labour, feeds him with his flesh ; but the horse, with all his

excellencies, and his utility in contributing to our comforts and conveniency, does not furnish any food for our support. Whatever may be the advantages or disadvantages of this unprecedented increase of horses, it appears to be, at present, very difficult to restrain; and the most judicious and economical taxes have not yet operated as any check to its progress; nor is it, indeed, likely that they should, since scarcely any one, at this day, will make use of his legs, unless by the compulsory law of necessity.

To form a just idea of the various and extensive utility of the ox, we should consider, that there is scarcely any part of him without its use. The skin is manufactured into leather; the hair, mixed with lime, is used in plaistering; the bones serve as a substitute for ivory, and being calcined, are used by the refiners as an absorbent, to carry off the baser metals in refining silver; and when ground in a mill, they become the most excellent manure for fertilizing the ground. Boxes, combs, knife-handles, drinking vessels, and various other articles, are made of the horns, which, when softened in boiling water, become so pliable, as to be formed into lanterns—an invention ascribed to King Alfred: we are furnished with candles from the tallow, and the feet afford an excellent oil, adapted to a variety of purposes. Glue is made of the cartilages, gristles, and the finer pieces of the cuttings and parings of the hides, boiled in water. The thinnest of the calves' skins are manufactured into vellum. The blood is the principal ingredient in making Prussian blue. Saddlers, and others, use a fine sort of thread, prepared from the sinews, which is much stronger than any other equally fine. The gall, liver, and urine, are not without their uses in medicine, or in manufactures.

The universally known productions of milk, butter, and cheese, as well as the excellent nutriment which beef affords to the human body, clearly show, that the cow is, of all quadrupeds, and indeed of the whole animal creation, the most beneficial to man. The Egyptians were so sensible of its utility, that in their emblematical theology, the ox was considered as one of their principal divinities, or rather as a symbol of that diffusive goodness which they discovered throughout the whole creation. In this country, however, of which the soil and climate are so congenial to its nature, the poor are in a great measure excluded from the benefits of this excellent quadruped. The observation of Dr. Goldsmith, that "the cow is the poor man's pride, his riches, and support," is pleasing, but unfortunately inaccurate. That agreeable and elegant writer had not been accustomed to see and observe much rural economy. The monopoly of land deprives the greatest part of the poor of the means of keeping

a cow; and in most country villages, milk cannot be procured at any price.

In the next chapter, we shall give an account of some other species of horned cattle, which, not being domesticated like the cow, are not so useful to man, although it is not improbable, that, by a proper management, more benefit might be derived from them than is generally imagined.



CHAPTER V.

"The buffalo and bison, wild and fierce,
Roam the wide plains, exulting in their strength."

THE URUS, OR WILD BULL,

AN animal which greatly resembles the tame kind, except in some trifling differences, which it probably owes to its natural wildness, in conjunction with the luxuriance of the pastures in which it ranges. It is chiefly to be met with in the extensive plains and forests of Lithuania, where it grows to an amazing size and bulk, being in these respects superior to every other quadruped except the elephant. It is entirely black, except a single stripe of white that runs along the whole length of the back: its eyes are red and fiery; the horns thick and short; the forehead is ornamented with a bushy covering of thick curled hair; the neck is short and strong, and the skin exhales an odour somewhat resembling musk. The female, although much less than the male, exceeds in size the largest bulls produced in this country.

THE BISON

Is another animal which differs from the rest of the ox kind, principally in having a large hump between its shoulders, resembling the boss of the camel, only with this difference, that it is placed more forward. The bison is furnished with a long shaggy mane, which forms a beard under his chin. His head is small, and his forehead wide; his eyes fierce and red, and his horns extremely expanded. He is exceedingly wild and fierce, and the pursuit of him is very dangerous, except in forests where the trees are large enough to conceal and secure the hunters. The general method of taking this animal, is by digging deep pits, covered over with grass, on the opposite side of which some of the hunters placing themselves, tempt the enraged creature to pursue them, when, falling into the snare, he is soon overpowered.

The bison is met with in most of the southern parts of the world, while the urus is chiefly found in the cold or temperate regions. The former vary much in size, according to the variations of soil and climate. Those of Abyssinia, Madagascar, and some parts of India, where the soil is fertile, and the pasturage luxuriant, are very large; but in Arabia Petræa, and some parts of Africa, are small, and from their diminutive size, and other discriminating characteristics, acquire the denomination of

THE ZEBU.

This, however, does not appear to be a distinct species, but only a degenerate kind of the bison, diminished in size from the scantiness of its feeding, a circumstance which appears to have a decided effect on the bulk of all horned cattle. Both the bison and the zebu are gentle when tamed. They have generally very fine glossy hair. The hunches on their back are of different sizes, some weighing from twenty to thirty, and others from forty to fifty pounds. The bison is well known in America, especially on the banks of the Mississippi, where they herd together in great numbers, and are hunted for their flesh, which there, as well as in many other countries, is esteemed excellent food. In Persia there is a breed of oxen entirely white, with lumps on the back, and small blunt horns: they are strong, and are used to carry burdens; like the camel, they crouch down when about to be loaded. In India, the oxen are of different sizes, and substituted for horses in travelling, as well as for drawing. They are saddled like horses, and may be made to move at a tolerable pace. A small string is drawn through the cartilage of the nostrils, which, being fastened to a long cord, answers the purpose of a bridle. They will perform journeys of above a thousand miles, at the rate of thirty-six or forty miles a day, and their pace is generally a moderate trot. They are also used in drawing chariots, for which purpose white oxen are the most esteemed. This circumstance, of oxen being used in India for riding, as well as for drawing, is an additional proof of their extensive and various utility, and shows that, if the exuberant goodness of the Creator had not bestowed the horse, the ox might have served as an useful substitute.

THE GRUNTING OX

Of Tartary, may, from its similarity to the bison, be considered as a distinct species. Its distinguishing peculiarity consists in its grunting like a hog, instead of lowing like an ox. It abounds principally in the country of Tibet, where it is domesticated, and answers all the purposes of our horned cattle: but there is also a wild breed of these animals, which are exceeding fierce,

and will sometimes turn with great fury upon any assailant. The tail of the grunting ox is much esteemed in Tibet, and sold at a high price as an ornament, being of a beautiful white colour, long, and very bushy. When mounted on a silver handle, it is used by persons of distinction in India, for the purpose of chasing away the flies. It is also sometimes fixed to the ear of the elephant, by way of ornament. When dyed red, and the hair formed into tufts, it is used by the Chinese to adorn their bonnets.

THE BUFFALO

Is another species of horned animal, which, by its appearance, seems to be of the cow kind, and in its form bears the most striking general resemblance to the common ox. Its habits and propensities are also similar, with respect to its aptitude for domestic uses, as both are equally submissive to the yoke; yet no two species of animals can be in reality more distinct; and they have the most singular antipathy against each other, which appears the more extraordinary, as nothing of the kind is observed between the common cow and the bison, although they resemble each other much less in form.

The buffalo is not so beautiful an animal as our common ox, his figure being more clumsy, his body thicker and shorter, and his legs, in proportion, longer; his head, which he carries nearer the ground, is smaller than that of the cow; his horns are not so round, nor is his body so thickly covered with hair. The flesh of the buffalo is described by some as hard and unpalatable, and exhaling a disagreeable smell. Sparman, on the contrary, says, that the flesh is coarse, and rather lean, but full of juice, of a high but not unpleasant flavour. In regard to this, much may depend on the caprice of taste, as well as on the difference of climate and feeding; for experience proves, that these circumstances have a very powerful influence on all animals, especially those of the horned kind, both with respect to their size and shape, the nature of their flesh, and the quality of their other productions. The innumerable shades of difference, produced in the same species of animals by the influence of soil and climate, and other adventitious circumstances, are every where observable, and admit of an endless variety: it is, therefore, no wonder, that naturalists, as well as travellers, should differ in the description of minute particulars. All, however, agree, that the buffalo brings forth no more than one calf at a time, and that its period of gestation is twelve months, which evidently proves it to be a distinct species from the cow.

A very singular circumstance, relative to these animals, is recorded by those who completed the last voyage of Captain Cook to the Pacific Ocean. When at Pulo Condore, they procured



BOS BISON

Plate 211

eight buffaloes, which were to be conducted to the ships by ropes, put through their nostrils, and round their horns. But when these were brought within sight of the ship's people, they became so furious, that some of them tore out the cartilage of their nostrils, and set themselves at liberty; and others broke down even the shrubs to which it was frequently found necessary to fasten them. All attempts to get them on board would have proved fruitless, had it not been for some children whom the animals would suffer to approach them, and by whose puerile management their rage was quickly appeased: and when the animals were brought to the beach, it was by their assistance, in twisting ropes about their legs, that the men were enabled to throw them down, and by that means get them into the boats. And what appears to have been no less singular than this circumstance, was, that they had not been a day on board before they became perfectly gentle.

The wild buffalo is found in India, and in many parts of Africa, especially towards the Cape of Good Hope. These are a formidable tribe, and it is impossible to escape their fury, otherwise than by climbing into some large tree, as they will break down one of a moderate growth. Many travellers have been instantly gored to death, and trampled to pieces under their feet. They run with amazing speed, and cross the largest rivers without difficulty. Professor Shemberg tells us, that when travelling in Caffraria, he and his companions had just entered a wood, when they discovered a large old male buffalo, lying alone, in a spot that, for the space of a few square yards, was free from bushes. The animal no sooner observed the guide, who went first, than with a horrible roar he rushed upon him. The man, turning his horse short round, behind a large tree, the buffalo rushed straight forward to the next man, and gored his horse so dreadfully in the belly, that it died soon after. The two men climbed up into trees, and the furious animal made his way towards the rest, of whom the Professor was one, who were approaching, but at some distance. A horse, without a rider, was in the front: as soon as the buffalo saw him, he became more outrageous than before, and attacked him with such fury, that he not only drove his horns into the horse's breast, but even out again through the very saddle. This horse was thrown to the ground with such violence, that he died instantly, having many of his bones broken. Just at this moment, the Professor happened to come up; but, from the narrowness of the path, having no room to turn round, he was glad to abandon his horse, and take refuge in a tolerably high tree. The buffalo, however, had finished; for after the destruction of the second horse, he turned suddenly round, and galloped away.

Some time after this, the Professor and his party perceived an extremely large herd of buffaloes grazing in a plain. As they were now well acquainted with the disposition of these animals, and knew that they would not attack any person in the open plains, they approached within forty paces, and fired amongst them. The whole troop, notwithstanding the individual fierceness and boldness of the animals, surprised by the sudden flash and report, turned about and made off towards the woods. The wounded buffaloes, being unable to keep pace with the rest of the herd, were separated from them. Amongst these was an old buffalo, which ran with fury towards the party. They knew that, from the situation of the eyes of these animals, they could see in scarcely any other direction than straight forward; and that, in an open plain, if a man that was pursued, darted out of the course, and threw himself flat on the ground, they would gallop forward to a considerable distance before they missed him. These circumstances prevented their suffering any material alarm. The animal, from this contrivance, passed close by them, and fell before he appeared to have discovered his error. Such, nowever, was his strength, that, notwithstanding the ball had entered his chest, and penetrated through the greatest part of his body, he ran at full speed several hundred paces before he fell.

The hunters kill the buffaloes by firing on them from the tops of trees, with balls partly composed of tin, as the hide of this animal is too hard to be penetrated by a common musket-ball. The hide of the buffalo is very valuable, and the leather made from it is much esteemed for its smoothness, impenetrability, and duration—qualities which render it excellent for harness.

This animal, although so wild and formidable in a state of nature, is very easily tamed: it is patient and persevering, and being endowed with great strength, is very serviceable for the draught. In Italy, the buffalo is domesticated, and constitutes a considerable part of the wealth and the food of the lower sort of the peasantry, who use them for the purposes of agriculture, and make butter and cheese from their milk, which is, however, reckoned inferior to that of the cow. Buffaloes are also found in a tame state in many parts of the east, as well as in Italy. It is observed by D'Obsonville, that it is a singular sight to see large herds of them, morning and evening, cross the Tigris and Euphrates. They proceed all wedged together, the herdsman riding on one of them, sometimes standing upright, and sometimes couching down, and if any of those on the outside straggle, or lag behind, stepping lightly from back to back, to drive them along. Thus it appears, that the buffalo, although naturally fierce and terrible when wild, is, by the management of man, rendered an useful animal, and a valuable gift of the bountiful Creator.

CHAPTER VI.

THE SHEEP.

"Behold, where bound, and of its robe bereft
 By needy man, that all-depending lord,
 How meek, how patient, the mild creature lies.
 * * * * *

A simple scene, yet hence Britannia sees
 Her solid grandeur rise; hence she commands
 Th' exalted stores of every brighter clime!"—THOMSON.

OUR attention will now be called to a species of the animal creation, which, in respect of utility, may be deservedly ranked with the horse and the ox, and, indeed, is scarcely less conducive to the well-being of the human race, than those two most valuable quadrupeds. In some respects, indeed, this inestimable creature may be said to excel both. If the horse be conducive to our pleasure and conveniency, and to the easy and expeditious performance of the greatest part of our business; if the cow furnish us with the most nutritive and strengthening part of our food, it is to the Sheep that we owe not only a very considerable portion of our aliment, but also the most essential part of our clothing.

The Sheep is, in a peculiar manner, the creature of man; to him it entirely owes its protection, and to his necessities it amply contributes. On man, indeed, its existence depends; for without his fostering care, and the interest he has in its preservation, its numerous enemies would soon exterminate the whole race. Though singularly inoffensive, it does not, however, appear so stupid and inanimate as it is considered to be by Buffon, who describes it as "destitute of every art of self-preservation."—On mountains, and in extensive sheep-walks, where numerous flocks browse together, the sheep assumes a different character, and a ram, or even sometimes a wether, or an ewe, has been seen to attack a dog, and to come off victorious. Sometimes, in case of attack, they will have recourse to the collective strength of the whole flock, and drawing up into a compact body, and keeping close together, present towards every quarter a formidable front, which cannot be attacked without danger to the assailant. The sheep undoubtedly discovers less animation and sagacity than many other quadrupeds; but in the selection of its food, few display a greater share of instinctive discrimination. Its acuteness of perception, in regard to the approach of a storm, is also equal to what is manifested in this respect by almost any other animal.

The sheep, in consequence of the warm and oily nature of its fleece, is able to bear the greatest extremity of cold ; and whole flocks, in endeavouring to shelter themselves under a high hedge, or the brow of a steep hill, have frequently been buried many days under the snow without any detriment.

The varieties, observable in this quadruped, are so multiplied, that no two countries, nor scarcely any two districts, produce sheep exactly of the same kind. A visible difference is found between all the different breeds, either in size, the shape, the fleece, or the horns. The woolly sheep is an inhabitant only of Europe, and the temperate regions of Asia ; if it be transported into a hotter country, it not only becomes less prolific, but its flesh loses its flavour, and what is still more remarkable, its wool changes into a long rough kind of hair, which, by its openness and coolness, is a covering far better suited to a warm climate, than the close and woolly fleece with which it is clothed in these parts of the world ; a circumstance which exhibits a remarkable instance of the wisdom and goodness of Divine Providence, in providing for the well-being of all creatures.

The sheep, in the mountainous parts of Wales, where they are rendered wild by the unrestrained liberty which they enjoy, do not always go in large flocks, but sometimes graze in parties of about eight or twelve, one of which remains at some distance from the rest, to give notice should any danger approach. When the sentinel sees any one advancing, at the distance of two or three hundred yards, he turns his face to the enemy, keeping a watchful eye upon his motions, allowing him, usually, to approach within eighty or a hundred yards ; but if the suspected foe proceeds to come nearer, the watchful guard alarms his comrades by a loud hiss, or whistle, twice or thrice repeated, when the whole party instantly make off with great agility, always flying to the steepest and most inaccessible parts of the mountain.

It is very singular, that in the Holms round Kirkwall, in the island of Mainland, one of the Orkneys, if any person, about the lambing time, enters with a dog, or even without, the ewes suddenly take fright, and through fear, as it is imagined, instantly drop down dead, as though shot through the head with a musket-ball.

No country produces finer sheep than Great Britain. Those of Spain have finer wool, but their fleeces stand in no degree of comparison with those of Lincolnshire, and many other parts of this kingdom, for weight and general utility. Like other ruminating animals, the sheep wants the upper fore-teeth : it has eight in the lower jaw, two of which drop out, and at the age of two years are replaced ; four of them are renewed at the age of three, and the rest at that of four years. The ewe produces

one or two, and sometimes three, or even four lambs : such instances of fecundity, however, are rare. The time of gestation is five months, and she brings forth in the spring, seldom earlier than the month of February, or later than the middle of April.

The Lincolnshire breed of sheep, which, with some variations and intermixtures, is extended through most of the eastern and midland counties of England, is large, and bears heavy fleeces ; but the wool is very long, and not so fine as some others ; the mutton is also esteemed somewhat coarser than that of smaller sized sheep. The largest breed of sheep, in the whole island, is found on the banks of the Tees, in that fertile valley which separates Yorkshire from the county of Durham. Some of these sheep have been fed to the weight of fifty pounds per quarter ; one, in particular, was found to weigh sixty-two pounds and a half per quarter ; this was supposed to be the heaviest sheep ever slaughtered in this kingdom. This breed of sheep is more prolific than several others ; but those of Dorsetshire are principally remarked for their extraordinary fecundity, being capable of producing twice a year. From this breed, the tables of the great and opulent are supplied with early lamb at Christmas, or sooner if required. Great numbers of these are sent to the London markets, and sold at the enormous price of ten, or perhaps fifteen shillings per quarter. This circumstance contributes not a little to enhance the value of the Dorsetshire breed of sheep, which, with some variations, is spread through most of the southern counties, but found pure and unmixed only in Dorsetshire and Wiltshire. In the north-west parts of England, there is a hardy, black-faced breed, the wool of which is coarse and shaggy, but the flesh is esteemed excellent. In the northern districts of Scotland, a breed of sheep is common, which is remarkable for the smallness of its size, as well as the fineness of its mutton : their wool, which is also very fine, is streaked with the various colours of black, brown, and red. Some of these sheep do not weigh above six or seven pounds per quarter.

The Shetland sheep are generally without horns, and handsome, although very small. When fed, they do not weigh more than eight or ten pounds per quarter. This breed of sheep is exceeding hardy, and consequently well adapted to the severe climate where it is found ; but what renders them an object of importance is, that their wool is esteemed by good judges to be equal in fineness to that of Tibet of which the Indian shawls are made. These sheep have a kind of long hair intermixed among the wool—a singular instance of the providence of the All-wise Creator, in considering the wants of this animal in so cold a climate ; for as they are never shorn, the wool is pulled

off once a year, and the hair remaining, preserves the creature from the piercing winds of that northern region.

The breed of English sheep has, by the persevering attention of Mr. Bakewell, of Dishley, in Leicestershire, been exceedingly improved; and his example has been successfully followed by many eminent breeders. The improved Leicestershire breed is now in the greatest esteem in most parts of the kingdom, and almost all the principal breeders endeavour to introduce some mixture of it into their stock. Its superior qualities are principally those of fattening quickly, and carrying the greatest weight of mutton upon the smallest proportion of bone.

From these circumstances, we readily conceive the beneficial effects of those improvements which have been made in our sheep, as well as our horses and horned cattle, and consider the importance of that respectable body of men, the English farmers, to whose spirited exertions, and skilful management, this country owes, under Divine Providence, the number and excellence of those flocks and herds, which range over our hills, enliven our plains, and constitute an inexhaustible source of plenty and wealth.

THE TARTARIAN SHEEP.

Tartary produces a breed of sheep somewhat larger than those of this country. The colour of the ram is brown, mixed with white, and that of the ewe, black and white. Their ears are pendulous, and instead of a tail, nature has furnished them with a large protuberance of fat. These sheep abound in Tartary, and great numbers of them are annually sold into Russia.

The African, or Guinea sheep, are found in most of the tropical countries. They are large, strong, and swift, with short horns, pendulous ears, and coarse hairy fleeces.

THE MANY-HORNED SHEEP.

The sheep of Iceland, Russia, and other cold regions of the north, resemble ours in the form of their bodies, but differ from them in having a number of horns, some having four, and others eight. Their wool is long, and intermingled with hair, and their colour a dark brown.

THE WALLACHIAN SHEEP

Have long spiral horns, standing upright, in the form of a screw. They resemble those of this country in size and shape, and have long shaggy fleeces. They are also found in Crete, as well as in many isles of the Archipelago. The broad-tailed sheep, common in Persia, Syria, Barbary, and Egypt, are remarkable

principally for their large and heavy tails, which are frequently a foot broad. The tails of these sheep weigh from twenty to fifty pounds, and are esteemed a great delicacy, being of a substance between fat and marrow.

The sheep of the mountains of Tibet, afford wool of an extraordinary length and fineness, of which are made the Indian shawls, frequently sold in this country, at the exorbitant price of forty or fifty pounds. Formerly an opinion prevailed, that those shawls were made of the hair of the camel; and it is only since the English began to form a communication with Tibet from India, that the real material of this singular manufacture has been known.

We have been somewhat prolix, in exhibiting the different kinds of those quadrupeds which are so conducive to our convenience and comfort, and so essential to our well-being, that we cannot but consider them as designed by the all-wise and bountiful Creator peculiarly for our use. To examine each species, by following all its varieties, proceeding from soil, climate, and human management, would be an endless, and, indeed, an useless task. Our intention is, only to present to view the great outlines of nature, with which every one ought to be acquainted, that so we may be enabled to form a right judgment of their properties and use, and to conceive some faint idea of the infinite goodness of the Great Author of all existence, in creating them for our benefit, as well as of his power and wisdom in giving them qualities so perfectly adapted to that purpose. Our views of these subjects will still be enlarged, when we consider, that of the sheep, as well as of the ox, there is scarcely any production that is not useful to man. Of the fleece we make our clothes; the skin produces leather, suitable to a multiplicity of purposes; and the very entrails are formed into strings for violins and other musical instruments. It must also be observed, that the milk and butter, produced from sheep, constitute in some countries no inconsiderable article of food; and although inferior to the same productions of the cow, might serve as a very good succedaneum, if Providence had not supplied us with that useful and excellent quadruped, which affords another striking instance of the prolific bounty of the Creator in affording us such a variety of resources.

One particular and very interesting circumstance, relative to the animal now under consideration, must not be forgotten. It merits our attention, and will furnish our minds with a copious fund of reflection, as it will enable us to comprehend the great importance of our sheep as an object of national advantage. In the reign of Edward the Third, when the English wool was exported, it brought in £150,000 per annum, a vast sum in that

age. At this time, the value of the wool, annually shorn in England, is estimated at about five millions sterling, and when manufactured conjointly with the Spanish wool imported, to the annual amount of not more than six or seven hundred thousand pounds, the value of the cloth must be above twenty millions sterling.

Our woollen manufactory stands unrivalled by any nation, and employs a greater capital, produces a greater profit, and furnishes employment to a greater number of hands, than any other manufacture in Europe, or probably in the world. Thus we perceive, that the sheep of this island, besides supplying us with the most essential comforts and conveniences of life, are the support of our commerce and population, as well as one of the great sources of our wealth. When we give these considerations their due weight, we do not adopt the principle advanced by some naturalists, who pretend that animals were not primarily intended for the use of man, but are only capable of a secondary application to his purposes; for it is evident, that in many instances, what these philosophers term the secondary purpose, is so manifest, and so essentially necessary to our comfortable existence, that we cannot, without impropriety, as well as ingratitude, suppose it to have been excluded from the original design of the all-wise and bountiful Creator. The wonderful qualities and varied utility of the horse, the cow, and the sheep, exhibit a striking example of this subordination of the animal race, and of an adaptation to the circumstances and wants of the human species, which evidently appears to be the effect of an all-wise design, and a constituent part of a comprehensive plan. In order to perceive the reasonableness of this hypothesis, we have only to consider the benefits we derive from these animals, and the difficulties under which mankind must have laboured without them, or some others which might have served as substitutes. The important and interesting reflections, both moral and religious, which these three excellent species of quadrupeds, so commonly seen, but so seldom viewed with a philosophic eye, are calculated to excite in the contemplative mind, will, we trust, be a sufficient apology for the prolixity of this article.

CHAPTER VII.

THE GOAT.

“The mountain’s brow,
Where sits the shepherd on the grassy turf,
Inhaling, healthful, the descending sun;
Around him feed his many-bleating flock,
Of various cadence ; his sportive lambs and goats,
This way and that convolv’d, in friskful glee,
Their frolics play.”—THOMSON.

WE shall now proceed to the description of another kind of animal, which, although in some respects it bears a considerable resemblance to the sheep, differs from it so widely in others, as to give evident proofs of a distinction of species. This you will readily perceive to be the Goat, which, in some countries, is esteemed no mean substitute for the highly useful animal which was the subject of the last chapter. Before we proceed in this view of the works of nature, we must cast a glance at a creature which seems to be so nearly allied to each of the two species, as to form one of those connecting links which we so often perceive in the continued chain of animal existence.

THE MUFFLON, OR MUSMON,

So much resembles, in some respects, the sheep, and in others, the goat, that it has, by different naturalists, been classed with each of the two species. Its horns resemble those of the ram ; they are bent backward, and in all their convolutions sometimes measure from five to seven feet in length. The old rams of this kind often have desperate conflicts, and sometimes precipitate one another from the summits of the rocks which they frequent. From their covering, which is hair, they seem to participate more of the species of the goat than of that of the sheep, and they appear to partake of the disposition of the former, in frequenting the highest and most rugged parts of mountainous countries. This renders the hunting of the musmon, which is much practised by the Tartars and Kamtschatdales, extremely difficult and dangerous. The musmons of Kamtschatka grow to the size of a young stag, and are said to be so strong, that ten men are hardly able to hold one of them. The horns are also extremely large, and are made use of for a variety of purposes. This animal is found in the uncultivated and mountainous parts of Greece, Sardinia, and Corsica, and also in the desert plains of Tartary. In the swiftness of its running, it resembles the deer more than either the sheep or the goat. As it has been known to breed

with the common sheep, Buffon, and many other naturalists, have supposed it to be the primitive race of that animal. Whether or not this be the case, is, however, a problem of which the solution is difficult, if not impossible.

THE COMMON GOAT

Occupies the next place in the scale of animal existence, and although inferior in utility to the sheep, has, in many respects, a visible affinity to that quadruped; but the services of the latter cause the goat to be held in less estimation, and its domestication and improvement to be considered as an object less worthy of attention. The goat is more hardy than the sheep, and in every respect better adapted to a state of liberty. It is stronger, swifter, and more playful; not easily confined to a flock, but choosing its own pasture; it delights to roam at large. It is easily sustained, and appears to have a stronger inclination for liberty than for delicacy of food. For this reason, it is valuable chiefly to the inhabitants of wild and mountainous countries, where it finds an ample supply from the spontaneous productions of nature, in situations inaccessible to most other quadrupeds. Goats climb the loftiest rocks, and stand secure on the brink of the most abrupt precipices; for this purpose, their feet are admirably formed by nature, the hoofs being hollowed underneath with sharp edges, resembling the inside of a spoon, which prevents them from sliding off the craggy rocks which they frequent. This singular conformation of the feet of this animal exhibits a remarkable instance of the wisdom and goodness of the Creator, in so perfectly adapting its organization to its instincts.

The goat delights in uncultivated heath, or the shrubby rock, rather than in the fields cultivated by human industry. It bears well either a hot or a cold climate. Its milk is of an agreeable taste, highly nutritive, and medicinal, especially in consumptive cases. Several places, in the mountainous parts of Ireland, Scotland, and Wales, are much resorted to by valetudinarians, for the purpose of drinking the milk of the goat, and its effects are often found salutary in vitiated and debilitated habits.

Sonnini, in his edition of Buffon's Natural History, gives a curious instance of the readiness with which the goat will permit itself to be sucked by animals of a different kind, and even of a much larger size than itself. He tells us, that he saw, in the year 1780, a foal, that had lost its mother, thus nourished by a goat, which was placed on a barrel, in order that the foal might suck with more convenience. The foal followed its nurse to pasture, as if she had been its mother; and was attended with the greatest care by the goat, which always called it back by her bleatings, when it wandered to any distance from her.

These animals, from extreme familiarity, will sometimes become troublesome. Buffon relates, that in 1698, an English ship, having gone into a harbour in the island of Bonavista, two negroes went on board, and offered the captain as many goats as he chose to carry away. He expressed his surprise at this offer, when the negroes informed him that there were only twelve persons on the island, and that the goats had become so numerous, as to be extremely troublesome; for, instead of being difficult to catch, they followed them about with an unpleasant degree of obstinacy, like other domestic animals.

In many of the mountainous parts of Europe, goats constitute the principal wealth of the inhabitants, and supply them with many of the necessaries and conveniencies of life. They lie upon beds made of their skins: they live upon their milk without bread, and make from it both butter and cheese. The flesh of the kid is esteemed a rarity, and considered as little inferior to venison. From these considerations, it appears that the goat, although superseded in this country by the sheep, is a quadruped of very considerable value. We may also add, that being extremely sensible of attention, and grateful for kindness, it soon becomes attached to man. But it is a short-lived animal, full of ardour, but soon exhausted. It generally produces two, or sometimes three, young at a time; but in warm climates, it is more prolific.

THE IBEX,

According to M. Buffon, is the parent stock from which our domestic goat is descended; and, indeed, the former is very similar to the latter in the shape of its body, but differs considerably from it in the shape of its horns, which are much larger. The ibex frequents the most elevated parts of the Alps, in the Vallois, and the country of the Grisons: it is also found in the mountains of Crete. It is extremely wild, and the chase of it exceedingly dangerous, as it always keeps upon the highest points of the rocks, and being very strong, frequently turns upon the huntsman, and hurls him headlong down the precipice. It will mount a perpendicular rock of fifteen feet, at three leaps, or rather at three successive bounds of five feet each. It does not appear to find any footing on the rock, but seems to touch it merely to be repelled, like an elastic substance striking a hard body. In the last extremity, this active and intrepid animal can throw itself from the tops of the highest rocks, and escape unhurt.

The colour of the ibex is generally a dark brown, intermixed with a little grey; a streak often runs along the top of its back; the belly and thighs are of a delicate fawn colour.

THE CHAMOIS GOAT

Inhabits the same districts as the ibex, and abounds in the mountains of Dauphine, Piedmont, Savoy, and Switzerland. They are seen in flocks of eighty or a hundred, dispersed among the crags of those stupendous mountains. The chamois resembles in size the common goat, but is greatly admired for the beauty of its eyes, which are round, sparkling, and animated. Its head is ornamented with two horns, of about half a foot long, of a beautiful black, rising from the forehead almost between the eyes. These horns stand forward, bending a little back towards the extremities, and ending in a sharp point. The ears are elegantly placed near the horns, and two stripes of black adorn each side of the face; the rest being of a pale yellow. This animal has scarcely any cry, except a feeble bleat by which it calls its young; but in cases of danger, when it gives warning to the rest of the flock, it makes through its nostrils a hissing noise, which is heard to a great distance. It is extremely vigilant, and to an eye remarkably quick and piercing, adds a scent not less acute and distinguishing. When it perceives its enemy distinctly, it stops a moment, then, in an instant, takes flight; and it is said to be able, by the acuteness of its smelling, to discover a man at the distance of more than a mile. Upon any apprehension of danger, the chamois begins a loud hissing. The first hiss is in the beginning very sharp, but deeper towards the close, and continues the whole time of one respiration. Having, after this first alarm, reposed itself for a moment, it looks round, and if it perceives the danger to be real, it continues to hiss at intervals. During this time, the animal seems in the most violent agitation, striking the ground with its fore feet; it bounds from rock to rock, and flies to the edges of the precipices to look for the enemy. It is said, that some of them always act the part of sentinels; and it has generally been observed, that, where a herd of them is seen feeding, two or three are mostly detached from the rest. The hunting of the chamois is attended with the same difficulties and danger as that of the ibex; and like the latter, it will, when hard pressed, turn upon the hunter, and precipitate him from the top of a craggy rock, where he must meet with inevitable destruction. The usual method of taking them, is by placing persons at all the passages of a glade or valley, and shooting them from behind the clefts of the rocks. Their extreme swiftness renders them unapproachable by any mode of pursuit, and dogs are totally useless in this chase. They run along the crags with such rapidity, and bound from rock to rock with such ease, that no other animal can follow them; and nothing can be more astonishing, than the extraordinary facility

with which the chamois climbs and descends precipices, that to all other quadrupeds are inaccessible. These animals will frequently leap from a rock thirty feet high, and light, with the greatest security, on some fragment or excrescence on the side of the precipice, which is only just large enough to place their feet on; and such is the extreme quickness and agility of their motion, that to a spectator they seem rather to fly than to leap. such extraordinary advantages has the great Creator given to this singular quadruped, to serve as means for its preservation.

The chamois, notwithstanding its extraordinary wildness, is, when caught, very easily rendered tame and docile, and like other animals of the goat kind, soon becomes attached to good treatment. Its flesh is very good and wholesome, and the skin of the chamois was once reckoned, when tanned, exceedingly valuable for its softness and warmth. At present, however, the leather called shammy, is made also from the skins of the deer, the sheep, and the domestic goat.

The chamois is so much incommoded by heat, that in summer they are never found any where but under the shade of high and spreading trees, in the caverns of rocks, amidst fragments of ice, or under rough and overhanging precipices, facing the north, as they cannot bear the rays of the summer's sun. They pasture only in the evening or morning, and when the day begins to grow warm, always retire to their shady recesses. Thus we find, that an all-wise Providence has, in every respect, adapted the nature of this, as of every other creature, to the region which it is destined to inhabit.

THE GOAT OF ANGORA

Is remarkable for its long, thick, and glossy hair, which is of a dazzling whiteness, and is highly valued as a profitable article of commerce; for of this are made those beautiful cloths, well known among us by the name of Camblets. These animals inhabit the rocky mountains of Pontus, where they experience a considerable degree of cold, and, as well as the sheep of Tibet, so famous for the fineness of its wool, from which the high-priced Indian shawl is made, might, in all probability, thrive as well in Britain as in their native country. Both these valuable quadrupeds live in a climate which, in winter, is much more severe than ours. They might, undoubtedly, be transplanted into this country with success, and if once introduced, would not only tend to beautify and enliven the rugged scenes of our most bleak and barren mountains, but render the uncultivated and unproductive parts of the island a source of utility and wealth. In Portugal there is also a breed of fine large goats, remarkable for their abundance of milk, of which some yield not less than six quarts

per day. These also, if introduced into some of the mountainous and barren tracts of this island, might be an useful acquisition.

THE SYRIAN GOAT

Differs in nothing from ours, except in its ears, which are pendulous, and from a foot to two feet in length. M. Buffon supposes this to be only a variety of the Angora goat; from which, however, it differs much more than from the domestic kind. Its horns are short and black; those of the goat of Angora are also black, but larger, and very differently turned, proceeding horizontally from each side of the head, and twisted almost in the form of a screw. The Syrian wants also the fine hair, which renders the Angora breed so estimable. The Syrian goats abound in the neighbourhood of Aleppo, and numbers of them are daily driven through the streets of that city, to supply the inhabitants with milk, which they prefer to that of the cow.

These are the principal varieties of the goat kind, although we might add a number of others, such as the African goat, which is much smaller than the common kind. In America, there is also a small breed of goats, nearly similar to those of Africa, and which, according to Buffon, was transplanted from thence into the new continent. This, indeed, is very probable, as it is certain, that the goat, as well as every other domestic animal, was unknown in America at the time of its discovery by the Spaniards.



CHAPTER VIII.

THE ANTELOPES.

“From rock to rock the swift antelope springs.”—ANON.

WE have exhibited to view the principal varieties of the sheep and the goat kind, and the approaches they make towards each other, by continual, and, in some respects, almost imperceptible gradations. Nature, indeed, proceeds in her variations by insensible degrees, and a line of distinction can sometimes scarcely be drawn between her varying shades, or a discrimination made between two neighbouring tribes of animal life. Between the sheep and the goat, we have seen the musmon sometimes classed with the former, and sometimes with the latter, and forming the connecting link between the two species, in such a manner, as to render it difficult to determine where the one begins and the other ends; and to fix the boundaries between the goat and the

deer, is still more difficult. In almost all transitions, from one kind to another, a middle race is found, which appears to partake of the nature of both, and which yet cannot precisely be classed with either.

THE GAZELLES, OR ANTELOPES,

Form one of those connections of animated nature, holding a middle rank between the goat and the deer; and although they have, by some systematic writers, particularly Linnæus, been classed with the goat kind, yet some others have considered them as a distinct race; and, indeed, if they have properties in common with the goat, especially the similitude of their horns, and the circumstance of not casting them, they greatly resemble the deer in other respects. The characteristics which distinguish this tribe of animals, both from the goat and the deer, are chiefly these: The horns are annulated, and have longitudinal furrows running from the base to the apex. Of all animals, the deer kind have the most beautiful eyes, to which the Eastern poets make frequent allusions, in describing the attractive glances of their favourite mistresses. Besides the extraordinary beauty and mildness of its aspect, the gazelle surpasses the roebuck in the delicate formation of its limbs, as well as in the fineness and glossiness of its hair. It is elegant in its shape, and rapid in its motions; of a restless and timid disposition; vigilant and vivacious; and its boundings are astonishingly light and elastic. These may be considered as the general characteristics of all the different species, of which our limits permit us to enumerate only a few, although they are ramified into almost numberless varieties. Of these we shall remark

THE BLUE GOAT,

So named from its colour, which is a fine blue, and shines with a gloss resembling that of velvet. Its belly is white, and beneath each eye it has a large white mark: its tail is about half a foot long, with a brush of long hair at the end: its horns are turned backward, and three-fourths of the length, from the base, is decorated with twenty-four rings; but the uppermost quarter is smooth, and terminates in a point. This animal inhabits the hottest parts of Africa.

THE PIED GOAT

Is an inhabitant of the same country, and large herds of them are seen in the forests and plains of Senegal. It is remarkable for having a white band running along each of its sides, crossed by two others, whence it is called the harnessed antelope. On each side of the rump it has three white lines, in a downward

direction. The colour of its body is a deep tawny, with white spots on the thighs. The horns are straight, about nine inches long, and turned backward.

THE WOOD GOAT,

Which is found in the southern parts of Africa, near the Cape of Good Hope, lives mostly in the woods, from whence it has received its appellation. This animal is accurately described by Dr. Sparman; but as it has no such particular distinctions, as can render it strikingly dissimilar to the rest of the kind, we shall proceed to

THE WHITE ANTELOPE,

Which is supposed to be the pygarg, mentioned in the book of Numbers. It is an inhabitant of Africa, and in the neighbourhood of the Cape of Good Hope, herds of several thousands sometimes cover the plains. It must, however, have once been an inhabitant of Palestine, or at least of Egypt or Arabia; for it is not to be supposed, that the prohibitions of the Jewish law would have comprehended a quadruped, found nowhere but in the torrid zone, or in the southern parts of Africa.

The white antelope is a beautiful creature, about two feet and a half high, and about three feet in length. The distance of its horns, at the base, is about one inch: from thence they gradually expand, to the distance of five inches, then turn inwards, and approach within about three inches of each other at the points: they are of a deep black, annulated about half way up from the base, quite smooth towards the top, and terminating in a sharp point. The predominant colour of this beautiful animal, is a light brown: its breast, belly, and inside of the limbs, are white, as is also the head, with the exception of a dark brown stripe, extending from each corner of the mouth to the base of the horns: a stripe of the same colour runs also along each side, from the shoulders to the haunches, forming a boundary between the snowy whiteness of the belly, and the light brown of the sides: the buttocks are white, and a stripe of white, bounded on each side by one of dark brown, extends from the tail, half way up the back; the tail is very slender, the lower part of it not being much thicker than a goose-quill; the hair is in general fine and short, but the dark stripes consist of hair longer than the rest. In the pursuit of these animals, it is equally curious and pleasant, to see the whole herd bounding over one another's heads to a considerable height. Some of them will take three or four high leaps successively. In this position they seem suspended in the air, looking over their shoulders, and showing their beautiful white backs. They are so extremely swift, as to re-

quire a fleet horse to overtake them. Their flesh is very well tasted, juicy, and delicate.

THE ELK ANTELOPE

Is likewise an inhabitant of Africa, and also of India. It has straight horns, two feet long, and of a dark brown colour, marked with two prominent spiral ribs, running two-thirds of their length, the tops smooth, with an inward inflection. The forehead is flat, with a crest of hair standing erect the whole length of it. This animal is one of the largest of the gazelle kind : it is of a bluish ash colour, and has a black mane, which stands upright, and runs the whole length of the back as well as of the neck. The elk antelopes live chiefly in the plains and valleys, and when hunted, always endeavour to run against the wind. The Dutch colonists, in the Cape settlement, are very expert in hunting this animal.

THE HART BEEST

Is the most common of all the larger kind of gazelles in Africa ; it is named by Mr. Pennant the cervine antelope. M. Buffon calls it the bubale, and it is supposed to be the bubalus of the ancients. Its flesh is very fine, somewhat dry, but of an agreeable flavour.

THE STRIPED ANTELOPE

Is a tall and beautiful animal, inhabiting the southern parts of Africa : it somewhat resembles the white antelope, but is larger : it has a longitudinal stripe of white along the back, with eight or nine stripes of the same colour diverging from it downwards, in the form of ribs.

THE GEMSEBOEK

Is another species of antelopes, famous for a concretion in the stomach, called the oriental bezoar. The power of expelling poison, which ignorance formerly attributed to it, caused it to be estimated at an enormous value. Some bezoars have been sold as high as £200. Experience, however, has discovered, that its virtues are only imaginary, and this once celebrated medicine is no longer used in countries where the study of nature has dispelled the mists of ignorance.

These descriptions of the principal distinctions of the gazelle, or antelope kind, are taken from that accurate and indefatigable investigator of nature, Dr. Sparman, who, from his residence at the Cape, and his active researches, was especially qualified to inform us of the nature and qualities of the animals in the southern parts of Africa. He mentions a number of other varieties

of the antelope, without entering into any details of their characteristics or qualities. Indeed, the most laborious naturalist must leave something imperfect. The beauties of the creation, both in the conformation of animals and the disposition of inanimate matter, are innumerable, and the ever-varying forms of Nature baffle discrimination, and exhaust description.

Other naturalists have added descriptions of the other animals of the antelope kind, which have been described by naturalists; it will, in this compendium, suffice to mention the names as the reebok, the grysbok, the klipspringer, the gnu, the steenbok, and the nanguer. We shall only remark, that

THE COMMON ANTELOPE,

Which abounds in all the northern part of Africa, is somewhat less than the fallow deer; that its horns, which are remarkable for a beautiful double flexion, are about fifteen inches long, and surrounded with prominent rings almost to the top, where they are about a foot distant from point to point, and that its colour is brown, mingled with red on the back, and white on the belly and inside of the thighs. The Barbary antelope, which is also very common, not only in the northern parts of Africa, but also in Syria and Mesopotamia, seems only to be a variety of the last-mentioned animal, to which it bears a striking resemblance.

THE CHEVROTAIN, OR LITTLE GUINEA DEER,

Cannot, however, be omitted, as it is not only the smallest, but also the most beautiful of all the antelope kind, and indeed of all cloven-footed quadrupeds. It is no larger than a half-grown cat, but in its shape it is elegant beyond description. Its fore-legs, at the smallest part, do not much exceed the thickness of a tobacco-pipe: its horns are straight, scarcely two inches long, and of a shining jet black. The colour of some of these elegant little animals, is a reddish brown, of others, a beautiful yellow, and their hair is short and exceeding glossy. These handsome little creatures are natives of Senegal, and other hot parts of Africa. They are also found in India, as well as in Ceylon, and many other of the oriental islands; but they can subsist only in a hot climate, and are too delicate to be kept alive in Europe.

These are only a few of the varieties of the gazelle kind, of which the ramifications and subdivisions are almost innumerable. They are, however, sufficient to excite an admiration of the unlimited power, incomprehensible wisdom, and diffusive goodness of the great Creator, displayed in the prolific energy of Nature.

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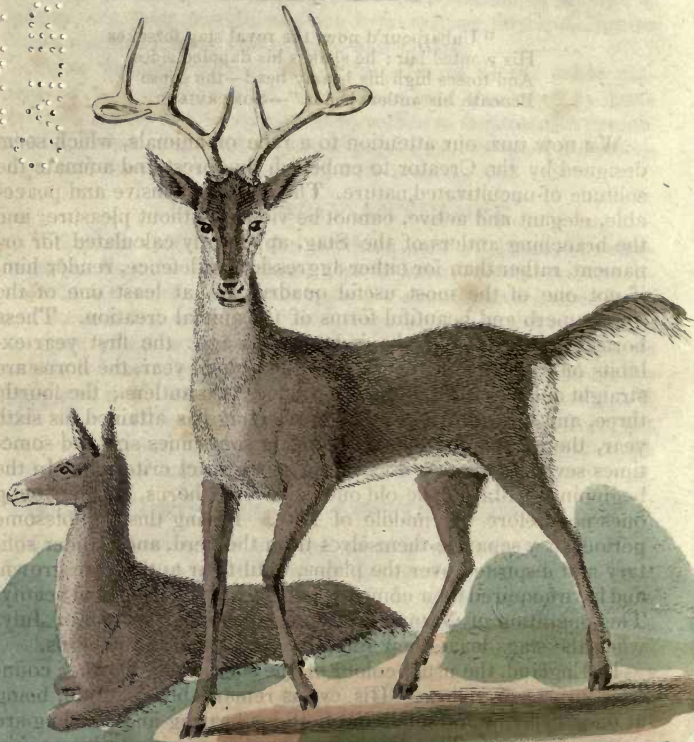
The Constitution of the United States is a document of great importance. It is the foundation of our government and the source of our rights. It is a document that has been the subject of much discussion and debate. It is a document that has been the subject of much study and research. It is a document that has been the subject of much admiration and respect. It is a document that has been the subject of much love and devotion. It is a document that has been the subject of much hope and faith. It is a document that has been the subject of much courage and bravery. It is a document that has been the subject of much wisdom and knowledge. It is a document that has been the subject of much power and influence. It is a document that has been the subject of much glory and honor. It is a document that has been the subject of much fame and reputation. It is a document that has been the subject of much wealth and prosperity. It is a document that has been the subject of much health and happiness. It is a document that has been the subject of much peace and harmony. It is a document that has been the subject of much love and affection. It is a document that has been the subject of much friendship and companionship. It is a document that has been the subject of much family and community. It is a document that has been the subject of much nation and world. It is a document that has been the subject of much life and death. It is a document that has been the subject of much birth and rebirth. It is a document that has been the subject of much growth and development. It is a document that has been the subject of much progress and advancement. It is a document that has been the subject of much success and achievement. It is a document that has been the subject of much triumph and victory. It is a document that has been the subject of much glory and honor. It is a document that has been the subject of much fame and reputation. It is a document that has been the subject of much wealth and prosperity. It is a document that has been the subject of much health and happiness. It is a document that has been the subject of much peace and harmony. It is a document that has been the subject of much love and affection. It is a document that has been the subject of much friendship and companionship. It is a document that has been the subject of much family and community. It is a document that has been the subject of much nation and world. It is a document that has been the subject of much life and death. It is a document that has been the subject of much birth and rebirth. It is a document that has been the subject of much growth and development. It is a document that has been the subject of much progress and advancement. It is a document that has been the subject of much success and achievement. It is a document that has been the subject of much triumph and victory.

THE CONSTITUTION OF THE UNITED STATES OF AMERICA: ANALYSIS AND COMMENTARY. BY JAMES M. SMITH. NEW YORK: THE CONSTITUTIONAL FOUNDATION, 1987. Pp. 128. \$12.95. ISBN 0-88126-111-1. This book is a comprehensive analysis and commentary on the Constitution of the United States. It covers the history of the Constitution, the structure of the government, and the rights of the citizens. It is a must-read for anyone interested in the Constitution. It is a book that is both informative and entertaining. It is a book that is both scholarly and accessible. It is a book that is both timely and timeless. It is a book that is both a work of art and a work of science. It is a book that is both a work of literature and a work of history. It is a book that is both a work of philosophy and a work of politics. It is a book that is both a work of law and a work of justice. It is a book that is both a work of faith and a work of hope. It is a book that is both a work of love and a work of compassion. It is a book that is both a work of wisdom and a work of knowledge. It is a book that is both a work of power and a work of influence. It is a book that is both a work of glory and a work of honor. It is a book that is both a work of fame and a work of reputation. It is a book that is both a work of wealth and a work of prosperity. It is a book that is both a work of health and a work of happiness. It is a book that is both a work of peace and a work of harmony. It is a book that is both a work of love and a work of affection. It is a book that is both a work of friendship and a work of companionship. It is a book that is both a work of family and a work of community. It is a book that is both a work of nation and a work of world. It is a book that is both a work of life and a work of death. It is a book that is both a work of birth and a work of rebirth. It is a book that is both a work of growth and a work of development. It is a book that is both a work of progress and a work of advancement. It is a book that is both a work of success and a work of achievement. It is a book that is both a work of triumph and a work of victory.

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CHAPTER IX. THE STAG.



DEER

CHAPTER IX.

THE STAG.

“ Unharbour'd now, the royal stag forsakes
His wonted lair ; he shakes his dappled sides,
And tosses high his beamy head—the copse
Beneath his antlers bends.”—SOMERVILLE.

WE now turn our attention to a race of animals, which seem designed by the Creator to embellish the forest and animate the solitude of uncultivated nature. The deer, inoffensive and peaceable, elegant and active, cannot be viewed without pleasure; and the branching antlers of the Stag, apparently calculated for ornament, rather than for either aggression or defence, render him, if not one of the most useful quadrupeds, at least one of the most superb and beautiful forms of the animal creation. These horns of the stag, are the index of his age: the first year exhibits only a short protuberance ; the second year, the horns are straight and single ; the third, produces two antlers ; the fourth, three, and the fifth, four. After the stag has attained his sixth year, the number of his antlers being sometimes six, and sometimes seven, cannot be considered as an exact criterion. In the beginning of March, the old ones shed their horns, but the young ones not before the middle of May. During this troublesome period, they separate themselves from the herd, and wander solitary and dispirited over the plains, until their antlers are grown, and have acquired their complete hardness, expansion, and beauty. This operation of Nature is completed about the end of July, when the stags leave their retreats, and return to the herds.

In England, the usual colour of the stag is red, in other countries, brown or yellow. His eye is remarkably beautiful, being at once brilliant and mild, and both his hearing and smelling are extremely acute. The stag is five years in coming to his perfection, and lives about thirty-five or forty years. It is now a generally received opinion among naturalists, that animals live seven times the number of years required to bring them to perfection ; but whether this opinion be sufficiently confirmed by experience, appears somewhat problematical.

The hind is the female of the stag : her head is not adorned with antlers, and she is smaller than the male. The hind goes between eight and nine months with young, and generally brings forth in May or June. She is exceedingly attached to her offspring, and will make the dog, or even the wolf, sometimes give back, by her efforts for its preservation, while the stag is so unnatural as to be one of its most dangerous enemies ; and he

would soon destroy the fawn, if not prevented by the maternal care of the dam, in concealing the place of its retreat.

The following historical fact, shows that the stag is capable of an extraordinary degree of courage. Some years ago, a tiger and a stag being enclosed in the same area, the stag, when attacked, made so resolute a defence, that his assailant was obliged to desist. During the reigns of our first Norman kings, the passion for hunting the stag was carried to such excess, that it was esteemed as small a crime to murder one of the human species, as to destroy one of these animals. In our island, large tracts of land were converted into forests for deer. Happily for mankind, these wide-extended scenes of desolation and oppression, have been gradually contracted : agriculture has spread itself over the land ; beasts of chase have given way to the ox and the sheep, and lowing herds and bleating flocks enliven the face of the country, and increase the national wealth.

THE FALLOW DEER

Is well known in this country : though it very much resembles the stag, they are a distinct species, and so determined an animosity exists between them, that, although both are gregarious, they will not herd together. The fallow deer is inferior to the stag in size and strength : it is seldom found wild in the forest ; but it constitutes the ornament of the park. Its horns, instead of being round like those of the stag, are broad, palmated at the top, and better furnished with antlers. Dissensions about pasturage frequently occur among these animals ; and in such cases, the herd divides into two parties, and an obstinate engagement ensues, to determine the possession of some favourite part of the park. Each party has its leader, which is always the oldest and strongest of the herd. They attack in regular order, fight with courage, support one another, retreat, rally, and seldom give up the contest, in consequence of one defeat. The combat is frequently renewed several days successively, till, after being repeatedly vanquished, the weaker party is obliged to leave the conquerors in possession of the disputed territory. The fallow deer goes eight months with young, comes to perfection in three years, and lives about twenty. There are many varieties of the fallow deer. In England, we have two sorts : the spotted, supposed to have been brought from Bengal, and the deep brown, originally introduced from Norway into this country, by King James the First. The Spanish fallow deer are as large as stags. There is also a fine breed of this animal in India, which abounds in the immense plains on both sides of the Ganges. It is beautifully spotted, and has horns resembling those of the stag : M. Buffon considers it as a middle species, between the fallow deer

and the stag. The deer, in its different varieties, is a race of animals extensively diffused, and appears to be spread over almost every part of the globe. The new world, where neither the sheep, the goat, nor the gazelle, were originally bred, is known to have been the native abode of the deer. The whole continent of America abounds with stags, and other animals of the deer kind, in almost all their varieties; and in some parts, the inhabitants have domesticated them, and find a rich supply of food in the milk and cheese which they produce. Thus the same animal, which in some countries, contributes only to the amusement of man, is in another converted to his use, and supplies his wants. This shows the diffusive bounty of the Creator, in rendering the stores of Nature so various and abundant, that necessity, if aided by industry and skill, is never at a loss for resources.

THE ROEBUCK

Is the smallest of the deer kind. Though formerly common, the herd is nearly extinct in this country; but in the mountainous parts of Scotland, it yet abounds. The form of this animal is elegant, and its agility astonishing: it bounds seemingly without effort, and runs with great speed: in courage it is at least equal to the stag, and its subtle artifices, when hunted, are proofs of its cunning: it turns repeatedly, till it has, by its various zig-zags, entirely confused the scent. The crafty animal thus confounds the dogs, until they are completely bewildered. The roebucks do not associate in herds, like other deer, but live in separate tribes. The female goes five months and a half with young; it comes to perfection in two, and lives about fifteen, years.

THE ELK

Is a native both of the old and new continent, being known in Europe by the name of the Elk, and in America by that of the moose deer. It is the largest of all the deer kind, and, according to some accounts, exceeds in size every other quadruped. The latter assertion, however, seems to be of doubtful authority; for naturalists vary considerably in their descriptions of this animal; and while some affirm that it grows to the height of twelve feet, others describe it as not much exceeding the size of the horse. When so much disagreement is found, either in description or narrative, the degree of credibility remains problematical. Those who speak of the enormous moose deer, say, that their horns are six feet long, and above ten feet asunder at the top; and from a variety of these horns, preserved in the cabinets of the curious, there is every reason to conclude, that the animal to which they belonged, must have been of an enormous size and great strength. Those also, who have traversed and

described the interior of North America, assert, that in certain places, both horns and bones have been found of a size so enormous, as to show that they have belonged to an animal of a larger species than any now known, and which is supposed to be at this time, through some unknown cause, extinct. The European elk, however, generally grows to the height only of seven or eight feet, and the length of ten feet from the muzzle to the rump. Its colour is mostly a hoary brown, and its hair long and coarse, like that of the bear. The horns are very large and spreading. Its pace is a high trot, shambling and inelegant; but it runs with great swiftness. In passing through woods, it carries its horns horizontally, in order to prevent them from being entangled among the branches.

In Canada, they have two different methods of hunting the elk, which are equally curious. The first is this: before the lakes are frozen, a number of inhabitants assemble in canoes, and form a vast crescent on the water, each end reaching the shore, while a party on the land surround an extensive tract. They are attended by dogs, and press forward with loud and clamorous shouts. The elks, alarmed by the noise, fly to the lake, and plunge into the water, where they are easily killed by the people in the canoes. The other method requires more preparation. The hunters enclose a large space of ground with stakes and branches of trees: the bottom opens into another enclosure, which admits of no egress, into which they drive the elks, where they are entangled in snares, or shot. The flesh of the elk is extremely palatable and nutritive; the tongue is excellent; and the nose is esteemed the greatest delicacy of Canadian epicurism. The skin makes excellent buff leather, being strong, soft, and light; and of it the Indians make their snow-shoes, and sometimes their canoes. The elk is an inhabitant of all the northern parts of America, and also of Europe and Asia, from Norway to the easternmost limits of Chinese Tartary; but is never found in any warm climate. That it once existed in Ireland is evident, from the horns which have been dug up in different parts of that island, and which, by their enormous size, seem to corroborate the almost incredible accounts that some naturalists have given, of the magnitude of the largest breed of these animals.

Elks are the easiest to domesticate and tame, of any of the deer kind. They will follow their keeper to any distance from home, and return with him at his call, without any difficulty. Mr. Hearne informs us, that an Indian, at the factory at Hudson's Bay, had, in the year 1777, two of them so tame, that when he was on his passage from Prince of Wales' Fort, in a canoe, they always followed him along the banks of the river; and at night, or on any other occasion, when he landed, they generally came

and fondled on him, in the same manner as the most domestic animal would have done, and never offered to stray from the tents. He did not, however, possess these animals long ; for he one day crossed a deep bay, in one of the lakes, in order to save a very circuitous route along its bank, and expected the creatures would as usual follow him round ; but, unfortunately, at night, they did not arrive ; and as the howling of wolves was heard, in the quarter where they were, it is supposed they had been devoured by them, for they were never afterwards seen.

THE REIN-DEER

Must be considered as an animal which merits, in the highest degree, the attention of the naturalist, as it exhibits an evident and most striking instance of the beneficence of that Being, whose omnipotent fiat called all creatures into existence. This extraordinary quadruped is a native of the icy regions of the north, where, by a wise and bountiful regulation of Providence, which diffuses the blessings of creation, in some degree, over every part of the habitable world, it exists for the support and comfort of a race of men, who, inhabiting a country where the beauties of Nature are unknown, and dreary sterility ever reigns, would find it impossible to subsist among their frozen lakes and snowy mountains, without the advantages which they derive from this inestimable domesticated animal. In temperate regions, the unbounded liberality of Nature furnishes a profusion of conveniences and comforts, and a variety of supplies for almost every want ; but to the Laplander, in his hyperborean abode, the horse, the cow, the sheep, and the goat, are all unknown. The rein-deer, however, supplies the place of all these useful animals. From this single quadruped, the Laplanders, and other inhabitants of these frozen regions, derive all those comforts that can render existence supportable in that inhospitable climate. It supplies the place of the horse, in conveying them over tracts that would otherwise be impassable ; that of the cow, in affording them milk ; and that of the sheep, in clothing them, not with its fleece, but with its skin : its very sinews supply them with thread, and there is scarcely any part of this animal that is not, in some degree, conducive to their comfortable existence.

The rein-deer, in Lapland, are of two kinds—the wild and the tame ; and the former being the strongest and most hardy, the latter are frequently turned into the woods, in order to produce a mixed breed ; which is generally preferred, especially for drawing the sledge, to which they are trained at an early age. They are yoked by a collar, from which a trace passes under the belly to the fore-part of the vehicle. These carriages are extremely light, and covered at the bottom with a rein-deer's

skin. The person, who sits in the sledge, guides the animal with a cord, fastened to its horns, and drives it with a goad. The wild kind, when yoked, sometimes prove refractory, turn against their master, and strike so furiously with their feet, that he is obliged to cover himself with his sledge, until the enraged creature has exhausted his fury ; but the tame ones are active and patient. A Laplander will, in this manner, travel about thirty miles a day, without forcing the rein-deer to make any extraordinary effort. This mode of travelling can be used only in the winter, when the country is covered with snow ; and though it is expeditious, it is troublesome, and sometimes dangerous.

As the rein-deer constitutes the sole riches of the Laplander, and is the source of his comforts, it may reasonably be supposed, that a constant attention to its preservation is his principal employment. As soon as the summer commences, the rein-deer are removed from the low pastures, where they would be constantly tormented by the insects, generated in the woods and morasses, and driven up to the mountains, where they are less incommoded. The gnat and the gad-fly are their greatest and most formidable enemies. Every morning and evening, during the summer, the herdsman returns to the cottage with his deer to be milked ; and a large fire of moss is made, for the purpose of driving off the gnats by the smoke. The quantity of milk, afforded in a day by one rein-deer, is about a pint, and it is sweeter and more nutritive than that of the cow. The female commonly brings forth two young ones at a birth, and the time of gestation is eight months. At four years old they are trained to labour, and continue serviceable about five years. The period of their natural life is about fifteen or sixteen years ; but they are commonly killed, for their flesh and their skins, about the age of eight or nine. Their flesh is good, and their tongues are esteemed a great delicacy. The horns of the rein-deer are long and slender, bending forward, with brow antlers, broad and palmated. Mr. Bewick says, that a pair in his possession measured two feet eight inches in length, and two feet five inches from tip to tip, their weight being nine pounds. The projecting brow antler was fourteen inches long, one foot broad, and serrated at the end.

The rein-deer is found wild in the northern parts of America, and abounds in the vicinity of Hudson's Bay. It is also common in all the northern regions of Europe and Asia, from Lapland to Kamtschatka. Several of the Laplanders possess herds of them to the number of five or six hundred, and some of the richest of the Kamtschatdales are said to have several thousands. It is well known, that of every kind of deer the flesh is exceedingly palatable, wholesome, and nourishing ; in every country,

indeed, venison is esteemed a luxury. How happy a circumstance is it, therefore, to the inhabitants of the countries beyond the arctic polar circle, that the all-bountiful Creator has furnished them with so useful an appendage to human existence, in these rigid climates, as the rein-deer, which, after having, during its life, so essentially contributed to their comfort, affords them after its death so excellent a repast. We have expatiated somewhat more largely on this article, as it exhibits so conspicuous an instance of the diffusive bounty of the Author of Nature, in thus providing for the subsistence of all his creatures, in every country, and under every climate; counterbalancing evil with good, in more equal proportion, and disseminating his blessings by a more impartial distribution, than we should, on a superficial view, be inclined to imagine.



CHAPTER X.

“And lives the man, whose universal eye
Has swept at once the unbounded scene of things;
Mark’d their dependence so, and firm accord,
As with unfaltering accent to conclude,
That thus availeth nought?”

THE curious and singular animals, which are made the subject of this chapter, are so imperfectly known to naturalists, and their distinguishing characteristics are so mixed and dubious, that it has not yet been determined in what class of quadrupeds their place ought to be assigned.

THE MUSK,

Which is an animal, interesting both in the view of Nature and the history of commerce, is found in the kingdom of Tibet, in some of the Chinese provinces, in the vicinity of the lake Baikal, and near the rivers Jenesea and Argun, from the 60th to the 45th degree of latitude, although seldom so far south, unless when heavy falls of snow prevent it from procuring food in the more northern climates. It has no horns, and whether it be a ruminating animal is uncertain: it is about two feet high at the shoulders; but its hind-legs are longer than the fore-legs, and it resembles the roebuck in form. Its length is about three feet from the head to the tail, which latter is not above an inch long. Its colour is a rusty brown on the body, but under the belly it is white. Upon the whole, it seems chiefly to have an affinity to the deer kind.

This animal is principally remarkable for the perfume it pro-

duces, which is so well known in the fashionable world, and so much used in the practice of physic. This drug is found in a bag, or tumor, nearly of the size of a hen's egg, which grows on the belly of the male. Of these bags, many thousands are annually sent to Europe, besides what are used in the East. Tavernier tells us, that, in one journey, he collected 7673 musk-bags. To account for this amazing supply, it is by some supposed, that the musk is often adulterated and mixed with the blood of the animal.

It is generally asserted, that when the musk-bag is first opened, so powerful an odour comes from it, that every person present is obliged to cover his mouth and nose with several folds of linen; and that, notwithstanding this precaution, the blood will frequently gush from the nose. When the musk is fresh, a very small quantity, in a confined place, is insupportable: it causes giddiness in the head and hæmorrhages, which have sometimes proved fatal.

THE NYL-GHAU

Is a curious and beautiful animal, which seems to be of a middle nature, between the cow and the deer, to both of which it bears a resemblance. In size it exceeds the latter, as much as it falls short of the former: its body, horns, an' tail, are similar to those of the cow; and the head, neck, and legs, resemble those of the deer. The colour is generally grey, from the mixture of black hairs and white. Along the ridge of the neck, the hair is blacker, longer, and more erect, forming a short, thin, and upright mane. Its horns are about seven inches long, and six inches in circumference at the base, terminating in an obtuse point. The ears are large, broad, and beautiful, being about seven inches in length, and of a white colour on the edge and the inside, except where marked in the hollow with two black bands, resembling the stripes of the zebra. The height of the nyl-ghau has been measured, and found to be four feet. Several of these animals were introduced into England in the year 1767, which continued to breed annually for some years. They were mild and gentle, pleased with familiarity, and fond of licking the hands of any person who stroked them, or gave them food, and never inclined to use their horns offensively. Their sense of smelling seems very acute, and they snuff exceedingly when any person approaches them. In the rutting season, however, they are fierce; and a labouring man, having approached the inclosure where some of these animals were kept, the nyl-ghau made furiously at him, with the rapidity of lightning, and darted against the paling with such force as to break one of its horns, which occasioned its death.

The nyl-ghau is frequently brought from the interior parts of India, where it is a native, and presented as a valuable gift to the nabob, and other great men, near the coast. Its flesh is esteemed delicious food; and Bernier says, that the Mogul Emperors took great delight in hunting this animal, of which they often killed great numbers, and distributed their flesh as presents to the Omrahs.

The animals here described, appear to be of a middle race, partaking of two different kinds, although it is difficult to determine which has the preponderancy. The singular quadruped, which will be our next object of attention, has by some been also considered as of a middle nature; but it seems rather to be a distinct genus.

THE CAMELEOPARD,

When standing erect, measures in height, to the top of the head, seventeen or eighteen feet; but its hind-legs are little more than half as long as the fore ones, a disproportion which prevents it from running swiftly, and renders its pace waddling and inelegant. Its neck is not less than seven or eight feet in length, and decorated with a short mane: its head is also adorned with two perpendicular horns, covered with hair, and tufted at the ends with a circle of short black hairs: its ears are long, and its eyes brilliant and large. The colour of this animal is a light grey, which, in the male, is interspersed with spots of a dark brown colour over the whole body, and of a pale yellow in the female. It is a timid and gentle creature, being equally destitute of the means of attack and defence, and by the disproportion of its parts, ill calculated for flight, which is probably the cause of its being so rare. It lives wholly on vegetables, ruminates, and is cloven-footed.

This singular rarity of animated nature, is found only in the most sequestered regions of Africa, (M. Buffon says that it is also a native of India) and is very seldom exhibited in Europe. It was, however, known to the Romans before the Christian era, and exhibited in their public games. History informs us, that Pompey produced ten of these extraordinary animals at once, in one of the amphitheatres of Rome—a striking instance of the enormous expense with which the leading men among the Romans used to amuse and influence the citizens, by the splendour of their public spectacles, and the gratification of popular curiosity. The Cameleopard has, indeed, at all times been regarded as a wonderful production of nature, and is well calculated to excite our admiration of that almighty and all-creating Power, which has replenished the earth with life in such a variety of forms.

CHAPTER XI.

..... "Patient of thirst and toil,
Son of the desert."

WE come now to the delineation of a species of quadrupeds, equally curious and interesting. The Camel and the Dromedary are in some countries not less useful and necessary, than the horse is in others, and render the most essential services to man, in places where that noble animal would lose all his utility.

THE CAMEL

Is a native of Arabia, and is chiefly confined to that and the adjacent countries, where it has, from time immemorial, been used in traversing those immense deserts of parched sand, which are impassable to every other quadruped except the dromedary, which, although distinguished by a different name, is supposed to be originally of the same race. The camel is to the Arabian what the rein-deer is to the Laplander, and supplies the place of the horse, the cow, and the sheep. Its milk is rich and nutritive: its flesh, when young, is excellent food, wholesome and invigorating; and its hair, or fleece, which falls off always in the spring, is manufactured into fine stuffs, and almost every article necessary for clothing, bedding, and the covering of their tents. To comprehend the value of the camel, in those regions where perpetual drought and sterility reign, we must figure to ourselves a country without verdure and without water, where a clear sky and burning sun above, from which no friendly shade affords a shelter, parches every living creature with intolerable thirst, while an immense expanse of scorched sands beneath presents to the eye a dreary scene of barren uniformity, in which no object reminds the traveller of the existence of animated nature. Such are those immense deserts, which the camel and the dromedary alone can traverse. It is, therefore, no wonder, that the Arabs regard the camel as an inestimable present from Heaven, a sacred animal, without the aid of which he could not subsist in those frightful deserts, which secure his independence, and surround him with an impregnable rampart.

In Turkey, Arabia, Persia, and Egypt, their whole commerce is carried on by means of those useful animals. The camel, in these countries, furnishes the most expeditious and the cheapest mode of conveyance. Merchants and travellers form themselves into numerous bodies, called caravans, in order to be able to protect themselves from the assaults of the formidable banditti which infest the borders of the desert. The usual rate of travel

ling in these caravans, is about twelve or fifteen miles per day, each camel carrying about four hundred weight, although the large and strong ones can carry above twice as much. They are unloaded every night, and suffered to feed at liberty. If they are in a part of the country where there is pasture, they eat enough in one hour to serve them twenty-four; but in those journies they seldom find any pasturage, and happily, delicate food is not necessary to them. Thistles, nettles, furze, and all those coarser vegetables, which other animals reject, furnish to the camel a dainty repast.

Although the ordinary rate of travelling on those commercial journies, in which the route is frequently of seven or eight hundred miles, be no quicker than it is here described, their predatory expeditions are differently conducted. The camel, as well as his master, is trained to these scenes of desultory warfare, and by every art inured to hunger, thirst, and fatigue. The plundering Arab will, in one day, if pursued, pass over a tract of desert of fifty miles. In this manner he will travel in those dreary solitudes; and during all that time of excessive fatigue, the camels are never unloaded; only a single hour of repose, and a ball of paste, for food, is allowed them each day. In this manner they often journey eight or nine days without meeting with any water, and during all this long space of time they can travel without drinking, while they carry water mostly in leather bags for the use of their masters. It is hence evident, that all the armies in the world would be inadequate to the pursuit of a troop of Arabs; and would infallibly perish, should they persist in such an attempt.

It is somewhat extraordinary, that the camels, when they arrive in the vicinity of a spring, or pool of water, discover it by its smell at the distance of more than a mile. Thirst then excites them to redouble their pace, and when arrived, they drink as much as serves them during the rest of their journey, even should it continue some weeks, which is not unfrequently the case.

Of all the quadrupeds, with which the earth is replenished, the camel is the most tame and submissive: he kneels down to be loaded and unloaded, and when overburdened, it makes the most piteous complaints, without ever offering the least resistance to his oppressor. If, however, his patience be extraordinary, it is much to be feared, that, under the hand of relentless man, his sufferings are sometimes extreme.

Camels have a considerable share of intelligence; and the Arabs assert, that they are so extremely sensible of injustice and ill-treatment, that when this is carried too far, the inflicter will not find it easy to escape their vengeance, and that they will re-

tain the remembrance of an injury till an opportunity offers for gratifying their revenge. Eager, however, to express their resentment, they no longer retain any rancour, when once they are satisfied; and it is even sufficient for them to believe they have satisfied their vengeance. When an Arab, therefore, has excited the rage of a camel, he throws down his garments in some place near which the animal is to pass, and disposes them in such a manner that they appear to cover a man sleeping under them. The animal recognizes the clothes, seizes them in his teeth, shakes them with violence, and tramples on them in a rage. When his anger is appeased, he leaves them, and then the owner of the garments may make his appearance without any fear, load, and guide him as he pleases.—“I have sometimes seen them,” says M. Sonnini, “weary of the impatience of their riders, stop short, turn round their long necks to bite them, and utter cries of rage. In these circumstances, the man must be careful not to alight, as he would infallibly be torn to pieces: he must also refrain from striking his beast, as that would but increase his fury. Nothing can be done, but to have patience, and appease the animal by patting him with the hand, (which frequently requires some time,) when he will resume his way and his pace of himself.” Like the elephant, camels have their periodical fits of rage, and during these they sometimes have been known to take up a man in their teeth, throw him on the ground, and trample him under their feet.

If we view, with a philosophic eye, the singular conformation of the camel, scepticism itself can scarcely call in question the evident marks which it bears of a regular design, in an organization so wonderfully adapted to the purposes for which it is destined, and to the place which it is appointed to hold in the system of animated nature. Its feet are peculiarly adapted to the soil on which he is to tread. They are liable to be injured by travelling on stones, and he cannot well support himself on moist and slippery clays; but his broad hoofs are perfectly calculated for travelling on the dry and parched sands of Arabia. But the peculiar and distinguished characteristic of the camel, is its faculty of abstaining from water longer than any other animal—a property so necessary in those immense deserts. For this, Nature has wonderfully provided, by a singular internal conformation; for, besides the four stomachs, which he has in common with other ruminating animals, he is also furnished with a fifth bag, that serves as a reservoir for water, where it remains uncorrupted, and without mixing with the other aliments. When the camel is pressed with thirst, or has need of water to moisten his aliment, in chewing the cud, he draws up into the stomach, or even into the throat, a part of this reserve. Furnished with

so capacious and so convenient a receptacle, he can take a prodigious quantity of water at once, and remain many days without drinking.

When travellers find themselves greatly in want of water, it is not unusual for them to kill a camel to obtain what its stomach contains, which is always sweet and wholesome. Aristotle says, that the camel always disturbs the water with its feet before it drinks : if this be the case, which, it must be confessed, is very doubtful, it is no doubt intended to drive away the almost innumerable swarms of insects, with which the waters of warm climates abound.

Among all the forms of animal life, which Nature in her immense variety exhibits, there is none that more conspicuously displays the justness of design, and perfect adaptation to the circumstances of its existence, and to the service of man, than the rein-deer and the camel ; without the former, life could not be supported among the snowy mountains and frozen bogs of Lapland, and without the latter, the sandy deserts of Arabia would be impassable. Few attempts have been made, to transplant the rein-deer into more temperate regions ; but of these few, none have yet succeeded : frequent trials have been made, to introduce the camel into other countries, but without effect. Though a native of a warm climate, the camel is not found in the tropical regions : it cannot subsist and propagate, either in the suffocating heat of the torrid, or the milder air of the temperate zone. The rein-deer is confined to the hyperborean climates, and seems incapable of subsisting under a more genial sky. Both the one and the other appear evidently designed by Providence, for the service and solace of man, in those countries where no other animals are qualified to supersede their utility.

THE DROMEDARY

Is not a different species, but only a distinct breed of the camel. They herd and propagate together, and the production, which is also prolific, is improved by various intermixtures, and generally esteemed of greater value than either of the original breeds. The Dromedary is inferior in size and strength, but swifter in pace, and is beyond comparison more numerous, and more extensively diffused, than the camel ; the latter being seldom found, except in Arabia, and some parts of the Levant, while the former extends over very spacious regions, and is common in Egypt, and all the northern parts of Africa, as well as in Persia, and some parts of Tartary and India. But the peculiarly distinguishing characteristic of the two races, is, that the dromedary has two hunches on the back, while the camel has only one : the former is also much swifter than the latter, and

will carry a man an hundred miles a day, for nine or ten days together, through uninhabitable deserts of parched sand, requiring neither whip nor spur to quicken its pace. Both the dromedary and camel are extremely sensible of good treatment, and in pursuing their fatiguing journies, are much enlivened by singing, or the sound of the pipe. Not many of the females are put to labour, being generally kept for the purpose of breeding. They usually produce one at a birth: the time of gestation, of both the camel and the dromedary, is twelve months: the period of its attainment to full strength and perfection, is the age of six years, and the duration of its life is reckoned from forty to fifty years.

As the dromedary is only a variety of the camel, the same reflections on the gracious dispensation of an all-wise Providence must again occur, in contemplating the varied bounties of the Creator, in forming two different tribes of this excellent quadruped, and assigning to one a more confined, and to the other a more extensive, sphere of utility.

Our attention is next called to a quadruped, which, from the similarity of its qualities to those of the species just presented to view, has obtained the appellation of the *Camel of the new world*; and in regard to its utility, making allowances for its inferiority in size and strength, is little less valuable than that of the old continent.

THE LAMA,

Of Peru and Chili, resembles, in its shape, the Arabian camel, but is destitute of the dorsal hunch: its height is from three to four feet: its neck is long, its head small, and its colour white, black, or russet, or a mixture of all these dispersed in spots. The female produces only one at a birth. The duration of the life of this animal is about twelve years, and its disposition is gentle, patient, and tractable.

The Lama was the only beast of burden which America originally produced; and, notwithstanding the introduction of mules, is still used for the conveyance of merchandise. Boliver says, that, in his time, three hundred thousand of these animals were employed in carrying the silver ore, dug out of the mines of Potosi, over the rugged hills and narrow paths of the Andes. They are exceedingly sure-footed, and with a load of about an hundred weight, will climb the most craggy rocks, and descend the steepest precipices. In their journies, they will sometimes walk four or five days successively, before they seem desirous of repose; and they then rest spontaneously twenty or thirty hours, before they resume their toil. Sometimes, when they are inclined to rest a few minutes only, they bend their knees, and lower their

bodies with great care, to prevent their load from falling off, or being deranged: when, however, they hear their conductor's whistle, they rise with equal precaution, and proceed on their journey. In going along in the day, they browse wherever they find herbage, and generally spend the night in chewing the cud. If their masters continue to abuse them, after they are determined not to rise, they are said sometimes to kill themselves, in their rage, by striking their heads alternately, from right to left, on the ground.

The wild lamas, called guanacos, are stronger and more active than the domestic breed. They associate in herds, and inhabit the highest regions of the Cordeliers des Andes, where their retreats are inaccessible to dogs, and therefore the most usual method of killing them is by shooting. They are hunted for their flesh and their hair: the former is said to be as good as mutton, and the latter is manufactured into cloth. The lama resembles the camel in its faculty of abstaining a long time from water, as well as in the nature of its food, which is of the coarsest kind. They have neither corn nor hay allowed them, and a very small quantity of coarse herbage is sufficient for their support.

THE PACOS

Is a native of the same countries as the lama, and seems to be only a variety of the same species, although a much smaller breed. Its body is covered with very fine long wool, of a dull purple colour, resembling dried roses, which constitutes a valuable article of commerce, and is manufactured into gloves, stockings, carpets, &c. The Pacos associate in numerous herds upon the most elevated parts of the Andes, where they are almost inaccessible, and endure the utmost severity of those frozen regions. The manner of taking them by the natives, is singular. They tie cords, with small pieces of cloth or wool, hanging loosely from them, across the narrow passes of the mountains, about three feet from the ground. They then drive a herd of these animals towards them, and they are so terrified by the fluttering of the rags, which they dare not pass, that they crowd together in great numbers, and are taken without difficulty.

The pacos, like the lama, is domesticated, and sometimes used for carrying burdens; but it cannot bear more than sixty or seventy pounds, and is less tractable and patient than the lama.

The great advantages derived from the wool of these animals, induced the Spaniards to attempt their introduction into Europe. Some of them were brought into Spain; but through mismanagement, or some other cause, the experiment did not succeed.

CHAPTER XII.

THE HOG.

“How instinct varies in the grovelling swine,
Compar’d, half-reasoning elephant, with thine.”

WE now proceed to the description of a kind of quadruped which seem to occupy, in the scale of animated nature, a middle place, between the herbivorous and the carnivorous race, and unite in themselves most of those distinctions which are peculiar to these two grand divisions of the animal kingdom. The Hog, in all its varieties, although inferior in utility to the horse, the cow, and the sheep; neither rendering us any service in the plough or draught; affording us neither milk, butter, nor cheese; nor furnishing any warm and woolly fleece for our clothing, is, notwithstanding, highly estimable in supplying us with excellent food; and its value is not a little enhanced by the shortness of the time requisite for its growth and fattening.

The Hog does not ruminate, but resembles the ruminating animals, in dividing the hoof, and preferring a vegetable diet; and it partakes of the nature of the carnivorous race, in relishing animal food. In the length of the head, and in having only a single stomach, it exhibits a similarity to the horse: in its cloven hoof, we trace a resemblance to the cow; and it approximates to the claw-footed kind, by its appetite for flesh, and its numerous progeny. Thus the species serves to fill up the chasm between carnivorous animals and those which feed upon herbage. This animal, producing from ten to twenty young at a birth, forms also a remarkable exception to the two general rules of nature; that the largest animals produce the fewest young, and that, of all quadrupeds, those which have claws are the most prolific.

THE COMMON HOG

Is so well known, that any description of it would be superfluous, and a few general observations are all that are requisite.

In no instance has Nature more conspicuously displayed her economy, than in forming this race of animals, and endowing them with an appetite to feed on a variety of things that would otherwise be wasted. The refuse of the kitchen, the barn, the garden, or the field, affords the swine a luxurious repast. It is restless in stormy weather, and seems particularly terrified, or affected, when the wind is extremely violent. At such times, it will often run screaming about, and appear much agitated.

In observing the disgusting appearance of this animal, its voracious appetite, and its dirty manner of feeding and living, it would scarcely be supposed that its flesh could have so excellent a flavour ; and if a man were wholly unacquainted with the nature of all quadrupeds, the hog would certainly be one of the last that he would select for his table.

Under this unpromising exterior, however, Nature has concealed one of the most valuable articles of our food. The flesh of this animal is of general use, and of great importance to this country, as a commercial nation. Linnæus says, that it is a wholesome food for those who use much exercise, but pernicious to such as lead a sedentary life.

The domestic sow brings forth twice a year, ten or twenty at each time, the period of gestation being something more than four months. She is an unnatural mother, and if not carefully watched, will frequently devour her own offspring. After a few days, however, she seems to imbibe a tolerable degree of maternal tenderness. The boar is equally, or still more, the enemy of the young, and if not prevented, would immediately destroy the whole litter.

As the hog is one of the most prolific animals of the creation, it is also one of those which are the most extensively diffused. It is found in every latitude, except within the frigid zone, and thrives in every temperate climate ; and it appears somewhat singular, that it is disseminated in most of the sequestered islands of the Pacific Ocean, although it did not exist in America, until transplanted thither by the Spaniards. In many parts of that continent, the hogs have now so exceedingly multiplied, that they run wild in the woods ; but how, or when, they were first introduced into the islands of the South Sea, is a problem that will scarcely ever be solved.

The learned pigs which have frequently been exhibited, might suffice to prove that these animals are not destitute of sagacity ; but the following instance, related by the Rev. Mr. Daniel, is too singular to be passed over in silence :—A game-keeper of Sir Henry Mildmay, broke a black sow to find game, and actually rendered her as staunch as any pointer. After Sir Henry's death, this animal was sold by auction for a very considerable sum.

In the island of Minorca, hogs are frequently yoked with asses, or young horses, in ploughing the land ; and in some parts of Italy they are used in hunting for truffles, which grow some inches under the surface of the ground, but which are soon discovered by the acute scent of these creatures.

THE WILD BOAR

Is the original stock of our common swine ; and the difference between them is only such as may readily be supposed between the wild and the domesticated state. The wild is smaller than the tame boar ; but his most distinguishing characteristics are his formidable tusks, which in some are almost a foot long, and exceedingly sharp : those of the under jaw are most to be dreaded, as with them he does the greatest mischief.

These animals, when young, keep together along with the old ones ; when attacked, the strongest face the danger, and form themselves into a ring, the weakest falling into the centre ; and in this position, few beasts of prey dare venture to engage them.

When the boar is arrived at a state of maturity, he ranges the forest alone and fearless, dreading no single adversary. He offends no animal whatever, but is at the same time a terror to the fiercest of those that would offer him any injury.

The hunting of the wild boar, although exceedingly dangerous, constitutes one of the principal amusements of the great, in those countries where he is to be found. But the dogs used for this sport, should be of a slow, strong, and heavy kind.

When the boar is roused, he moves forward at a slow pace, and, but little afraid of his pursuers, often turns and waits until the dogs come up, and offers to attack them : the wary animals, however, fully sensible of the ferocity of the enemy with whom they have to contend, draw back, and decline the engagement. The boar then again proceeds slowly, and the dogs renew the pursuit, which is thus continued with many intervals. At last, when the boar begins to be fatigued, the dogs rush in upon him from behind. Many of those which are young and inexperienced, lose their lives in the attack ; but others that are older, and well trained to the sport, hold him at bay, until the hunters come up, and kill him with their lances and spears.

In Europe, the wild boar is much less common than formerly ; and in a century or two, will probably be extinct : but there exists, in the hottest parts of Africa, a fierce and formidable race of these animals, called the wood swine, which will attack a man on horseback, if he venture to approach one of them ; and first breaking the legs of the horse with his tusks, will quickly destroy both him and his rider.

In the year 1765, a boar of this species was sent to the Prince of Orange, from the Cape of Good Hope. His eyes were so situated, as to prevent his seeing around him, being interrupted by the prominences of his face ; but his senses of hearing and smelling were extremely acute. His food was principally grain and roots ; and he always supported himself on the knees of his

fore-feet, in the acts of eating and drinking. His motions were more neat and agile than those of the common hog ; and from confinement and attention, he became gentle, and would allow himself to be stroked : but when offended, he assumed so fierce an aspect, that even the persons to whose care he was intrusted, dare not approach him. When occasionally set at liberty, he would frisk about with the utmost gaiety ; and sometimes pursue the fallow deer, or other animals.

THE PECCARY OF MEXICO,

Is an animal very much resembling the hog ; but as they will not breed together, it appears to be a distinct species.

These animals live chiefly in mountainous places, and feed on fruits and roots : they also eat serpents, lizards, and toads, and are very dexterous in first taking off the skins with their fore-feet and their teeth.

The whole body of this animal is covered with strong bristles, which, when he is irritated, rise erect, like the bristles of a hedge-hog.

These animals are exceedingly fierce. M. de la Borde relates, that, being once engaged in hunting a drove of peccaries, he and his party were surrounded by them, and obliged to take refuge upon a fragment of rocks ; and although they kept up a constant fire among them, the ferocious creatures did not retire until many of them were killed.

THE BARBGROUSA,

Although commonly classed with the hog kind, differs, in many particulars, from that quadruped, especially in the length of its legs, the slenderness of its body, and the texture of its hair, which is soft and fine, resembling wool, and of a dark grey colour, mixed with red.

The most striking characteristic of the hog, observable in this animal, is its tusks, which resemble those of the wild boar, and are of the most beautiful kind of ivory.

The barbgrousa is a gregarious animal : it is easily tamed ; its flesh is well tasted, and its body emits an exquisite scent. It exists in different parts of Asia and Africa, and is very common in several of the Oriental islands, especially in that of Borneo. This animal is, by some travellers, said to repose in a very singular manner, by fixing one of its upper tusks on the branch of a tree, and suffering its body to hang down. In this posture, suspended by a single tooth, it will remain a whole night, secure from every danger.

These kinds of quadrupeds already enumerated, and briefly described, are those which are chiefly useful to man, in affording

him their assistance, supplying him with food, and furnishing him with clothing. We shall now proceed to the inspection of a numerous race of different kinds, which seem created rather for themselves than for us ; but which still contribute to show the diffusive goodness, as well as the unlimited power, of the Creator, in bestowing the blessing of existence on so great a variety of creatures, and so amply providing for their support.



CHAPTER XIII.

THE ELEPHANT.

“Peaceful, beneath primeval trees, that cast
 Their ample shade o’er Niger’s yellow stream,
 And where the Ganges rolls his sacred wave,
 Or mid the central depth of black’ning woods,
 High raised in solemn theatre around,
 Leans the huge elephant ; wisest of brutes,
 O truly wise, with gentle might endowed ;
 Though powerful, not destructive !”—THOMSON.

IN the present chapter, is exhibited to our view, one of the most wonderful objects of animated nature.

The wisdom and goodness of the great Creator, are clearly visible, in the formation of those creatures, which have already been offered for consideration ; but the same divine attributes are not less conspicuous in a number of others, and particularly in the ponderous and unwieldy

ELEPHANT,

Which, in size and strength, surpasses all terrestrial animals, and in sagacity is inferior only to man ; although some assert the superiority of the moose—but this opinion seems erroneous, or at least very doubtful. The human race excepted, the elephant, indeed, is the most respectable, as well as the most wonderful of creatures, endowed with life and sensation.

This wonderful quadruped is a native of Asia and Africa, but is most numerous in the latter. In the extensive regions which lie between the river Senegal and the Cape of Good Hope, elephants abound more than in any other part of the world, and are also less fearful of man ; for the savage inhabitants of those countries, instead of attempting to subdue this powerful animal, and render him subservient to their necessities, seem only desirous of avoiding his anger. In the countries near the Cape, elephants are seen in large herds, consisting of many hundreds ;



ELEPHANT

and in the vast regions of Monomotapa, Monocmuci, and other parts of the interior of Africa, they are probably still more numerous.

A creature so extraordinary in its structure and qualities, merits to be somewhat particularly described, although no description can convey an adequate idea of its magnitude, unless the animal itself has been presented to the view.

At the Cape, the height of the elephant is from twelve to fifteen feet. His eyes are, in proportion to his size, very small, but lively, brilliant, and full of expression : his ears are very large, long and pendulous ; but he can raise them with great facility, and make use of them as a fan to cool himself, and drive away the flies, or insects. His hearing is remarkably fine : he delights in the sound of musical instruments, to which he is easily brought to move in cadence. His sense of smelling is equally delicate ; for he is highly delighted with the scent of odoriferous herbs. In each jaw he has four grinders, one of which sometimes measures nine inches in breadth, and weighs four pounds and a half. The texture of the skin is uneven and wrinkled, and full of deep fissures, resembling the bark of an old tree. The colour is tawny, inclining to grey. The legs of this animal are massy columns of three or four feet in circumference, and five or six in height. Its feet are rounded at the bottom, divided into five toes, covered with skin, so as not to be visible, and terminated in a nail or hoof of a horny substance. His body is remarkably round and bulky, and nearly destitute of hair.

The proboscis, or trunk, is the most singular and peculiar characteristic of this extraordinary quadruped ; and of all the instruments which the superabundant wisdom and goodness of the Creator has bestowed on the various forms of animal life, this is perhaps the most complete and the most admirable. It is composed of nerves, membranes, and sinews, and is the organ of smelling, feeding, and action, as the animal can bend, contract, lengthen, and turn it in every direction.

This fleshly tube terminates in a protuberance, which stretches out on the upper side in the form of a finger, and possesses, in a considerable degree, the dexterity of that useful member of the human body. With this instrument, the animal can lift from the ground the smallest piece of money, select herbs and flowers, untie knots, and grasp any thing so firmly, that no force can tear it from his grasp.

At the end of this trunk are placed the nostrils through which he draws in water, for the purpose of quenching his thirst, or of washing and cooling himself, which he performs by taking in a large quantity, and then spouting it out over his whole body, as if it issued from a fountain.

The extremes of cold and heat, seem equally to affect these animals : to avoid the latter, they seek the thickest shade, or retire to large rivers, in which they bathe, and sometimes amuse themselves, for several hours together, with swimming.

Though the elephant is so wonderfully aided by his trunk, in such a variety of operations, yet, with respect to the rest of his conformation, he is clumsy and unwieldy ; he goes forward, however, with ease and celerity, and in walking or running, is equal in speed to the generality of horses ; but he turns with difficulty, and not without taking a pretty large circuit. His neck is so short, that he can scarcely turn his head, and must wheel round in order to survey an enemy in the rear ; and his legs are so stiff, as scarcely to bend when he is advanced in years, so that when that period arrives, he is obliged to repose himself standing.

These quadrupeds subsist wholly on vegetables, and appear to have an antipathy against animal food. They associate in numerous herds, and when one of them happens to discover a plentiful pasture, he instantly gives a loud signal to the rest, as an invitation to partake of his luxurious fare. The meadows, however, must be equally fertile and extensive, to furnish a numerous herd with a competent supply ; and for that reason they often seek fresh pasturage, and do incredible damage whenever they stray into cultivated grounds, not only devouring vast quantities of food, but also destroying, by the enormous weight of their bodies, more than they eat.

The inhabitants of the countries where they abound, use every artifice to prevent the approach of these unwelcome visitants, making loud noises, and kindling large fires round their habitations : but, notwithstanding all their precautions, the elephants sometimes break in upon them, and destroy their harvest. It is very difficult to repel these formidable invasions ; for the whole herd advances together, and whether they attack, march, or fly, they generally act in concert.

Although the elephant be indisputably the strongest, as well as the largest of all quadrupeds, yet in its native woods and deserts it is neither formidable nor ferocious, but mild and peaceable in its disposition, equally fearless and inoffensive ; and when tamed by man, and tutored by his instructions, the noble animal submits to the most painful drudgery, and is so attentive to the commands of its master, that a word, or a look, is sufficient to stimulate him to extraordinary exertion.

Of all the animals that have been subjugated by the human race, the elephant is universally allowed to be the most tractable and obedient. When treated with kindness, he testifies his gratitude by fulfilling all the desires of his keeper, caresses him with affectionate fondness, receives his commands with attention, and

executes them with punctuality and zeal. He bends the knee for the accommodation of those who wish to mount upon his back, suffers himself to be harnessed, and seems to delight in the finery of his trappings.

These animals are used in drawing chariots, wagons, and various sorts of machines, one elephant drawing as much as six horses, and are of great use in carrying large quantities of luggage across rivers. They can travel near a hundred miles a day, and fifty or sixty regularly, without any violent effort.

The elephant is as magnanimous as he is mild, and ever willing to exert his extraordinary strength. We are told, that in India, where these creatures were once employed in launching ships, one of them was directed to force into the water a large vessel, which proving a task superior to his strength, the master said, in an angry tone, "Take away that lazy beast, and bring another." The poor elephant immediately redoubled its efforts, fractured its skull, and died on the spot.

The Indians have, from time immemorial, employed elephants in their wars: Porus, with eighty-five of them, opposed Alexander's passage over the Hydaspes. M. Buffon, with very great appearance of probability, supposes, that it was some of the elephants taken by that monarch in his Indian expedition, and transported into Greece, that Pyrrhus afterwards brought against the Romans. Since the introduction of fire-arms, however, elephants have been of little use in deciding the contests of men; for, being terrified by the explosion of artillery, they are soon thrown into confusion, and, becoming ungovernable, often trample down those ranks which they were brought into the field to defend. They are now chiefly kept for the purposes of labour, or of magnificent parade. They are likewise made use of in the East, as the executioners of criminals—a business which they perform with singular dexterity, breaking, at the word of command, the limbs of the condemned wretch with their trunks, or trampling him under their feet, and prolonging his sufferings, or accelerating his death, according to the directions of their keepers.

In Siam, Pegu, Tonquin, and Cochin China, elephants are still esteemed a valuable auxiliary in war, as well as an essential appendage to despotic magnificence and ostentatious parade; and the princes of those countries are attended on their tours by some hundreds of these enormous animals, for the purpose of conveying the ladies of the seraglio, as well as the immense quantities of baggage, which those eastern sovereigns always carry along with them.

The manner of taking and taming animals of so prodigious a strength as might seem to set all human power at defiance, is so curious, that it merits a few moments' attention.

In the midst of some forest, abounding with elephants, a large piece of ground is marked out, and surrounded with strong palisades, interwoven with large branches of trees: one end of this inclosure is narrow, from which it opens gradually, so as to take in a considerable extent of country. On this occasion, some thousands of men are employed, who place themselves in such a manner as to prevent the wild elephants from making their escape. They then kindle large fires, of which these animals are exceedingly afraid, and make, at the same time, a dreadful noise with drums, and other discordant instruments, to increase their terror. Another party, consisting of some thousands, with the aid of tame female elephants, trained for the purpose, drive the wild ones slowly towards the entrance of the inclosure, the whole train of hunters closing in after them, shouting and making loud noises, till they are driven, by insensible degrees, into the narrow part, through which there is an opening into a smaller space, strongly fenced in and guarded on all sides. As soon as one of the wild elephants enters this narrow passage, a strong bar closes it from behind, and he finds himself completely environed.

On the top of this passage, some of the huntsmen stand with goads in their hands, urging the animal forward to the end of the passage, where there is just room enough for him to go through. He is then received into the custody of two tame elephants, which stand one on each side, and press him into the service: if he be likely to prove refractory, they begin to beat him with their trunks, till he is reduced to obedience, and suffers himself to be led to a tree, where he is bound by the leg with stout thongs made of untanned elk-skin. The tame elephants are then led back to the inclosure; and other wild ones are brought to submission in the same manner.

They are all suffered to remain fast to the trees for several days. Attendants are placed by the side of each elephant, thus caught and confined, who supply him by little and little with food, till he is gradually brought to be sensible of kindness and caresses. In the space of fourteen days, his subjugation is completed. He then becomes attached to his keeper, and quietly resigns his prodigious strength to the service of man.

It is a singular circumstance in the history of this extraordinary quadruped, that, in a state of subjection, it is invariably barren; and though it has for ages been reduced under the dominion of man, it has never been known to breed; it consequently follows, that of the vast quantities of elephants tamed and trained to human purposes, there is not one that has not been originally wild: this would seem to indicate that it is not one of the creatures which nature primarily designed for the

service of man. It is, however, certain, that it is in an eminent degree capable of a secondary application to his purposes. The immense quantity of forage it requires, plainly shows that it is not an animal of general use in a domestic state ; and even in the countries where they most abound, and are most used, they are seldom kept, except by the great and opulent. As they do not propagate in a domestic state, the eastern princes are obliged to send every year into the forests, to procure fresh supplies, to make up the deficiencies of number unavoidably occasioned by age, disease, or accident. They are frequently hunted by the Dutch colonists at the Cape of Good Hope, who make great advantage of their teeth. The largest teeth weigh a hundred and fifty Dutch pounds, and are sold for as many guilders ; so that an expert shooter may, at one shot, earn three hundred guilders. It is not, therefore, to be wondered at, that a traffic so lucrative should tempt them to run great risks.

In approaching this animal, great care must be taken ; for if the elephant discover his enemy, he rushes out upon him.

One of these hunters, being on a plain, under the shelter of a few scattered trees, thought he should be able to approach near enough to shoot at an elephant that was at a little distance from him. The animal, however, discovered, pursued, and overtook him, and, laying hold of him with his trunk, instantly beat him to death. The elephant, however, although thus terrible when provoked, never attacks any but those who have given him offence, or are preparing for his destruction.

We cannot omit to mention an extraordinary phenomenon of natural history, which has often excited the curiosity, and so well merits the attention, of those who inquire into the works of Nature.

Teeth of this animal have been found in a fossil state, in places where we can scarcely suppose it possible that it should ever have existed. Some years ago, two great grinding teeth, and part of the tusk of an elephant, were discovered at the depth of forty-two yards in a lead mine in Flintshire, lying in a bed of gravel. The grinders were almost as perfect as if just taken from the living elephant ; but the tusk was much decayed, and very soft. How they came into such a situation, is a problem that neither historians nor naturalists can solve ; and the circumstance appears upon the whole so extraordinary, that it can scarcely be considered as any other than a "*lusus naturæ*."

Near the banks of several rivers of Siberia, tusks and teeth have frequently been dug up, which were formerly ascribed to a creature called the mammoth, but are now universally believed to have belonged to the elephant. The molares, or grinders, are precisely the same with those of the present race ; but both they

and the tusks are larger. Some of the latter have been known to weigh four hundred pounds; and grinders of the weight of twenty-four pounds, have not unfrequently been discovered. One of them was taken from a skeleton of the same head in which the tusks were found: and as the ivory was in every respect the same as that now generally known, and used for the same purposes, it appears evident that they belonged to the elephant. But as this quadruped does not seem ever to have existed in Siberia, and as the climate itself is contradictory to the supposition, it will perhaps for ever puzzle philosophy to account for the circumstance. The only probable conjecture is, that these animals must have been brought from India for the use of the Tartar princes, successors of Ginghis Khan, during the flourishing state of that dynasty.

A similar phenomenon has been discovered in America, on the banks of the Ohio. Tusks, teeth, jaw-bones, thigh-bones, and vertebræ, all of prodigious size, have been found five or six feet below the surface. Some of these tusks are near seven feet long, one foot nine inches round at the base, and one foot near the point. They differ from those of the elephant, in having a larger twist, or spiral curve, towards the smaller end. In the form of the grinders, there is a still greater difference; for they are made like those of a carnivorous animal, not flat and ribbed transversely on their surface, like those of the elephant, but furnished with a high and double row of conic projections, as if intended to masticate, rather than grind their food. These fossil bones have also been found in some parts of South America, particularly Peru and Brazil; but the living animal has hitherto evaded the search of the naturalist and the traveller.

Although elephants are more numerous in Africa, those of India are generally superior in strength, as well as size; and those of Ceylon, in particular, surpass all others in courage and sagacity. In those oriental countries, some of them are milk-white, and valued at an exorbitant price, as constituting one of the most pompous appendages of eastern magnificence.

As the elephant never propagates in a domestic state, the precise time of its gestation is but imperfectly known. Aristotle, however, assigns two years to this period. This extraordinary quadruped is thirty years in arriving at its full growth, and lives even in a state of captivity a hundred and twenty years: in a state of natural freedom, the duration of its life is supposed to be much further extended.

In regard to the elephant's discernment and sagacity, stories have been related that might seem incredible, and of which some are undoubtedly fictitious. Of such, however, as are so well authenticated as not to admit of a possibility of doubt, we have

a sufficient number to show its superiority over the rest of the brute creation. Some of the actions of this surprising animal might indeed almost seem to be the effects of a portion of intellect, rather than of mere instinct.

Among several anecdotes, communicated by the Marquis de Montmirail, we find that the cornac, or conductor of an elephant, had excited the animal to make an extraordinary effort, by showing him a vessel of arrack, which he pointed out as his reward; but when he had performed his arduous task, the elephant had the mortification of seeing himself disappointed of his expected recompense; and, impatient of being thus mocked, immediately killed his governor.

The man's wife, who was a spectator of this dreadful catastrophe, in a fit of agonizing grief, took her two little infants and threw them at the feet of the enraged animal, saying, "Since you have destroyed my husband, kill me also and my children." The elephant immediately stopped, and, as if stung with remorse, took up the eldest boy with his trunk, placed him on his neck, and would never afterwards obey any other governor. It is here to be observed, that the elephant is extremely fond of spirituous liquors, as well as of wine, and the sight of a vessel filled with these liquors, and promised as a reward, will induce him to make the most extraordinary exertions, and perform the most painful tasks; and to disappoint him is dangerous, and his revenge is almost certain. But if he be vindictive, he is equally grateful, and will suffer no kindness shown him to go unrewarded.

A soldier of Pondicherry, who frequently carried one of these creatures a certain measure of arrack, being one day a little intoxicated, and seeing himself pursued by the guard, who were about to conduct him to prison, took refuge under the elephant, where he fell sound asleep. The guard attempted in vain to take him from this asylum, the elephant defending him with his trunk. The next day, the soldier becoming sober, was terrified at seeing himself placed under so enormous an animal; but the elephant caressed him with his trunk, to remove his fears, and make him understand that he might depart in safety.

The elephant is sometimes seized with a sort of phrenzy, which renders him extremely formidable—so that on the first symptoms of madness, he is commonly killed, in order to prevent mischief: yet in these fits he has frequently been known to distinguish his benefactors; so strongly are gratitude and magnanimity impressed on his nature.

The elephant that was kept in the menagerie at Versailles, always discerned when any person designed to make a fool of him, and always remembered an affront, which he never failed to revenge at the first opportunity. Having been cheated by a

man who feigned to throw something into his mouth, he struck him with his trunk, and broke two of his ribs, and afterwards trampled him under his feet, and broke one of his legs. A painter being desirous of drawing him in the attitude of having his trunk erect, and his mouth open, ordered his servant to make him retain that posture, by constantly throwing him fruit; the servant, however, at last deceived him, which so roused his indignation, that, perceiving the original cause of this deception to be the painter's desire of drawing him, he revenged himself by throwing, with his trunk, a large quantity of water on the paper, which completely spoiled the design.

The elephants exhibited in Europe are commonly of a diminutive size, as the coldness of the climate both checks the growth and abridges the life of these animals. That which has just been mentioned, and which was sent by the King of Portugal to Louis XIV. A. D. 1668, died in 1681, being four years old at his arrival, and living only thirteen years in the menagerie at Versailles. He was six feet and a half high at four years old, and advanced in growth only one foot during the thirteen years that he lived in France, although he was treated with care, and fed with profusion. He had every day four pounds of bread, twelve pints of wine, two buckets of porridge, with four or five pounds of steeped bread, and two buckets of rice, boiled in water.

The elephant that died in 1803, at Exeter 'Change, was brought over in the *Rose East-Indiaman*, and purchased by the owner of the menagerie, for £1000. He was generally fed with hay and straw, but could also eat with avidity, carrots, cabbages, bread, and boiled potatoes. He was so excessively fond of beer, that he has been known to drink upwards of fifty quarts in a day, given by his numerous visitors. He was also allowed nine pails of water daily, given at three different times: but the quantity he ate could not be precisely ascertained, as he frequently scattered great part of the straw which was given him for food, and ate a considerable portion of that which formed his litter. This animal would kneel down, bow to the company, or search the pocket of his keeper, at the word of command.

Considering the elephant, if not the most useful, at least the most wonderful of all God's works displayed in the animal creation, being a monster of matter and a miracle of intelligence, it is presumed, no excuse for prolixity in its description is necessary. He unites in himself the judgment of the beaver, the dexterity of the monkey, and the sentiment of the dog; and adds to all these qualifications the peculiar advantages of extraordinary size, strength, and longevity. He can conquer the lion and the tiger, nor dare any beast of prey attack him. When we con-

sider that he can root up trees with his trunk ; that in war he carries on his back a tower containing five or six combatants ; that he moves machines and carries burdens to which the strength of six horses is scarcely adequate ; and that to this amazing force he joins courage, prudence, magnanimity, and gratitude for kind treatment, we cannot hesitate to give him the first place in the scale of animal beings ; nor can we wonder that the ancients considered the elephant as a prodigy, a miracle of nature ; and that men have in all ages set a high value on this greatest of quadrupeds.



CHAPTER XIV.

THE RHINOCEROS.

“Canst thou bind the unicorn with his band in the furrow ? Or will he harrow the valleys after thee ?”—BOOK OF JOB.

HAVING, in the last chapter, given a description of the elephant, we now proceed to give some account of a quadruped, which is indeed inferior to it in size, but in strength is surpassed by no other animal.

THE RHINOCEROS

Is a native of the same countries, and inhabits the same forests and deserts, as the elephant. The length of this animal, from the muzzle to the insertion of the tail, is generally about twelve feet, and the circumference of its body nearly equal to the length. The form of the head resembles that of a hog, except that the ears are larger, and stand erect. Its nose is armed with a formidable weapon peculiar to this animal, being an exceeding hard and solid horn, which sometimes grows almost four feet in length, and renders it a complete match for the fiercest adversary. Like the elephant, it is formidable to ferocious animals, but perfectly inoffensive to those that offer it no injury, and give no provocation.

The body and limbs of this animal, are covered with a skin so hard and impenetrable, that it will turn the edge of the sharpest scimitar, and (except on the belly) will resist the force of a musket-ball. This skin, which is of a blackish colour, forms itself into divers folds, by which the motions of the animal are facilitated.

The body, thighs, legs, and feet, are every where covered with tuberosities, or knots, which some writers have denominated

scales; but they are mere indurations of the skin, which in the creases between the folds, is not only penetrable, but quite soft, and of a light flesh colour. The belly of this animal is large, and its legs short, massy, and strong: its upper lip is long, capable of great extension, and, like the proboscis of the elephant, serves to lay hold of any thing that it would convey to its mouth.

The strength of the Rhinoceros is the most conspicuous advantage conferred on it by Nature. It seems rather to partake of the stupidity of the hog, than of the sagacity of the elephant, and, without being ferocious, or even carnivorous, is totally untractable. It is a solitary animal, loves moist and marshy grounds, especially near the banks of rivers; and, like the hog, delights to wallow in the mire. It seems to be subject to sudden paroxysms of madness, which are sometimes attended with fatal effects. A rhinoceros, which Emanuel, king of Portugal, sent as a present to the Pope, A. D. 1513, destroyed the vessel in which it was embarked; and some years ago, another, which had been exhibited at Paris, was drowned in a similar manner, in its passage to Italy.

The food of the rhinoceros is wholly of the vegetable kind it seems to prefer the grossest herbs to the most delicate pasturage; but yet is very fond of the sugar-cane, and of all kinds of grain. The hearing of this animal is very acute, and it listens with great attention to any kind of noise; but from the peculiar construction of its eyes, its sight is defective, and can be directed only to objects immediately before it. The acuteness of its hearing, and the impenetrability of its skin, oblige the hunters to follow at a distance, and watch it, until it lies down to sleep, when they approach with great precaution, and discharge their muskets all at once into the lower parts of its belly.

A fœtus of this animal, which had been extracted from the mother, was sent from Java, and deposited in the royal cabinet of Paris; and the memorial which accompanied this present, stated, that twenty-eight hunters had assembled to attack the female rhinoceros, and followed her at a distance for some days, observing carefully to reconnoitre her progress; and that having by these means surprised her when asleep, they approached her so near, as to discharge at one volley the contents of their twenty-eight muskets into the vulnerable part of her belly.

Without being useful like the elephant, the rhinoceros is extremely hurtful, by the devastation that he makes whenever he enters any cultivated grounds. His consumption of victuals is exceedingly great.

In the year 1743, Dr. Parsons published a minute description of one of these animals, that was brought from Bengal into England. Though only two years old, the expense of his food and

voyage amounted to near £1000 sterling. He consumed every day, at three meals, seven pounds of rice, mixed with three pounds of sugar, besides a large quantity of hay, and green plants: he likewise drank a great deal of water. In his disposition he was perfectly gentle, and would suffer any part of his body to be touched, without evincing the least displeasure; but when hungry, or struck by any person, he became fierce and mischievous, and an immediate supply of food was the only means of pacifying him.

A rhinoceros, brought from Akham, and exhibited at Paris in 1748, is said to have been extremely tame, and even caressing. He was fed chiefly on hay and corn, but the attendants frequently gave him thorny branches of trees, and sharp or prickly plants, with which he appeared much delighted, though they sometimes drew blood from his mouth and tongue.

The only two animals of this species that have been brought into England for a considerable number of years, were both purchased for the menagerie, Exeter 'Change. The first, of which the skin is still preserved, came from the East Indies; arrived in England in the year 1790, when he was about five years old and was, soon afterwards, purchased by Mr. Pidcock, for seven hundred pounds.

His docility was equal to that of a tolerably tractable pig: he would obey his master's orders, walk about the room to exhibit himself, and even allow his visitants to pat him on the back or side. His voice bore some resemblance to the bleating of a calf, and was most commonly excited when he perceived any person with fruit, or other favourite food, in their hands.

His food was invariably seized in his projecting upper lip, and by it conveyed to his mouth. He usually ate twenty-eight pounds of clover, the same weight of ship-biscuit, and a prodigious quantity of greens, every day. He was likewise allowed five pails of water, twice or three times a day; this was put into a vessel containing about three pails, which was filled up as he drank it, and he never ended his draught till the water was exhausted. He was also extremely fond of sweet wines, of which he would sometimes drink three or four bottles in the course of a few hours.

In the month of October, 1792, as this animal was one day rising up suddenly, he dislocated the joint of one of his fore-legs, and this accident brought on an inflammation, which occasioned his death about nine months afterwards. He died in a caravan near Portsmouth, and the stench arising from his body was so intolerable, that the Mayor ordered it to be immediately buried. However, about a fortnight afterwards, it was privately dug up during the night, for the purpose of preserving its skin,

and some of the most valuable of the bones, though the stench was so powerful, that the persons employed found the greatest difficulty in performing their operations.

The other rhinoceros, exhibited at Exeter 'Change, was considerably smaller than the former. It was brought over in the year 1799, and was purchased by an agent of the Emperor of Germany for £1000, but it died in a stable-yard, in Drury-lane, about twelve months after its arrival in England, and two months after it was sold by Mr. Pidcock. This animal is supposed to be the unicorn of the ancients. It was known to the Romans at an early period, and Augustus caused one to be exhibited in his triumph over Cleopatra.

The flesh of the rhinoceros is esteemed excellent by Indians and Negroes. Kolben says, that he has often eaten it with pleasure; but the skin is the most valuable part, as it makes the hardest and best leather of any in the world. In the countries where the rhinoceros is found, its horn, and indeed almost every part of its body, is esteemed an antidote against poison, as well as a remedy against various diseases. These virtues, however, are doubtless no more than imaginary. The period of this animal's life is supposed to be about eighty years; but this, and its time of gestation, are equally uncertain.

The double-horned rhinoceros is extremely rare, and its existence was long considered as fabulous, or at least doubtful, until it was discovered at the Cape of Good Hope, by Dr. Sparman, who has published a most exact anatomical account of this before-undescribed animal, which, however, does not appear materially to differ from that just described, except in the circumstance of having two horns, and in the appearance of its skin, which, instead of being covered with armour like folds, has merely a slight wrinkle across the shoulders, and on the hinder parts.

Mr. Bruce's account of the manners of the two-horned rhinoceros, is particularly worthy of attention. He observes, that "besides the trees capable of most resistance, there are in the vast forests within their range, trees of a softer consistence, and of a very succulent quality, which seem to be destined for the principal food of this animal. For the purpose of gaining the highest branches of these, his upper lip is capable of being lengthened out, so as to increase his power of laying hold with it, in the same manner as the elephant does with his trunk. With this lip, and the assistance of his tongue, he pulls down the upper branches, which have most leaves, and these he devours first. Having stripped the tree of its branches, he does not immediately abandon it; but, placing his snout as low in the trunk as he finds his horns will enter, he rips up the body of the tree, and

reduces it to thin pieces, like so many laths; and when he has thus prepared it, he embraces as much of it as he can in his monstrous jaws, and twists it round with as much ease as an ox would do a root of celery, or any small plant."

"When pursued, and in fear, he possesses an astonishing degree of swiftness, considering the unwieldiness of his body, his great weight before, and the shortness of his legs. It is not true, that in a plain he beats the horse in swiftness; for though a horse can very seldom come up, this is merely owing to his cunning. He makes constantly from wood to wood, and forces himself into the thickest parts of them; the trees that are dead, or dry, are broken down as with a cannon-shot, and fall behind him and on his side, in all directions; others, that are more pliable, or fuller of sap, are bent back by his weight, and the velocity of his motions; and after he has passed, restoring themselves, like a green branch, to their natural position, they often sweep the incautious pursuer and his horse from the ground, and dash them in pieces against the surrounding trees."



CHAPTER XV.

THE HIPPOPOTAMUS.

"The flood disparts: behold! in plaited mail,
Behemoth rears his head. Glanc'd from his side,
The darted steel in idle shivers flies:
He fearless walks the plain, or seeks the hills;
Where, as he crops his varied fare, the herds,
In widening circles round, forget their food,
And at the harmless stranger wondering gaze."

For the subject of this chapter, we have chosen another of the wonderful works of the Creator, more rare than the rhinoceros, and equally worthy of attention. The peculiar habits and disposition of the animal we are about to describe, concur with the remoteness of those solitudes which afford it an asylum, in throwing difficulties in the way of its investigation.

THE HIPPOPOTAMUS

Inhabits all the large rivers of Africa, from the Niger to the Cape of Good Hope, but is not found in any of those which fall into the Mediterranean, except the Nile, and exists in that part of it only which runs through Upper Egypt, and the fens and lakes of Abyssinia and Nubia.

This amphibious animal has been celebrated from the remotest

antiquity, and is mentioned in the Book of Job under the name of Behemoth; but although its figure is found engraven on Egyptian obelisks and Roman medals, it was imperfectly known to the ancient naturalists. Pliny, instead of correcting, has copied, and even multiplied the errors of Aristotle, and the example has been imitated by succeeding writers.

As the Hippopotamus mostly resides at the bottom of great rivers, it is not easy to ascertain its size. M. Vaillant informs us, that one which he shot, measured from the muzzle to the insertion of the tail, ten feet seven inches, and eight feet in circumference, but from the smallness of its tusks, he supposed it to be a young one. Dr. Goldsmith says, than an Italian surgeon having procured one from the Nile, found it to measure seventeen feet in length, and sixteen round the body. Its height did not exceed seven feet, and the jaws, when extended, were two feet wide. Ray says, that its upper jaw is moveable like that of the crocodile. In each jaw it has four cutting teeth; it has also four large tusks: those of the under jaw, which are the largest, are sometimes above two feet long. The canine teeth are said to be so hard as to emit fire, when struck with steel: they are extremely white, and for the purpose of making artificial teeth, are preferred to ivory. The grinders are square or oblong, and weigh sometimes more than three pounds. The skin is of a dusky colour, and although less callous, is thicker than that of the rhinoceros, and is manufactured into whips. The tail is about a foot long, tapered and flattened at the end, which is thinly planted with bristly hairs. The legs are so short, that its belly almost touches the ground, and the hoofs are divided into four parts unconnected by membranes. Some writers represent the figure of this animal as an intermediate form, between the ox and the hog. The Hippopotamus, although little inferior in size to the elephant, and of a figure calculated to inspire terror, is formidable in appearance, rather than in reality. Its disposition is mild and gentle, except when provoked or wounded. When this happens in the water, where its activity is equal to its courage, it will rise and attack boats or canoes, in the most furious and fearless manner. Dampier says, that he has known one of these animals sink a boat full of people, by tearing a hole in the bottom with its tusks. On the land, its movements are heavy; and the method of taking it, is by digging pits in those parts through which it passes in its way to the river, when it returns from feeding.

These animals seldom go far from the rivers, unless their banks fail of affording them a sufficiency of food. In that case, they sometimes stray into cultivated grounds, where, like the rhinoceros and the elephant, they make dreadful havoc, as they not

only devour an immense quantity of vegetable produce, but destroy still more by their feet, which support so enormous a ponderosity of body.

Professor Thunberg was informed by a respectable person at the Cape of Good Hope, that as he and a party were on a hunting expedition, they perceived a female hippopotamus come out of one of the rivers, and retire to a little distance, in order to calve. They concealed themselves among some bushes till the calf and its mother made their appearance, when one of them fired, and shot the latter dead on the spot. The Hottentots, supposing they might now seize the calf alive, immediately ran from their hiding-place; but the young animal, though only just brought into the world, eluded their pursuit, and plunged safely into the river. This the professor justly observes, was a singular instance of pure instinct; for the creature unhesitatingly ran to the river, as its proper place of security, without having received any previous instructions from the action of its parent.

The Egyptians have a curious method of freeing themselves, in some measure, from this destructive animal. They lay a quantity of peas about the places which he chiefly frequents; and when the creature comes ashore hungry and voracious, he begins eating in the nearest place, and greedily devours the peas, till they occasion the most insupportable thirst. He then rushes into his favourite element, and drinks so copiously, that the peas in his stomach swell so much as very soon afterwards to terminate his existence.

It is said, that these creatures are capable of being tamed; and Belon asserts, that he has seen one so gentle as to be let out of a stable, and led by its keeper, without attempting to injure any one.

The flesh of the hippopotamus is tender and well tasted, and by the colonists of the Cape settlement, esteemed exceedingly wholesome. The gelatinous parts of the feet and tongue, when dried, are considered as great delicacies.

THE LONG-NOSED TAPIR

Is the hippopotamus of the new world, and is by some considered as a species of that animal, to which, in its habits and disposition, it indeed bears a striking resemblance; but is much inferior in size, being no larger than a small cow, as well as different from it in the shape of its head, and especially its nose, which is long and slender, forming a sort of proboscis, capable of voluntary contraction and extension.

It is found in the woods and rivers, in that part of South America which extends from the isthmus of Darien to the river Amazon. It is a solitary animal, mild and inoffensive: it sleeps

in the day, feeds in the night, lives wholly on vegetables, and flies from every appearance of danger. Its flesh is said to be excellent food: its skin, which is very thick, and when dried is proof against the impression of an arrow, is, by the Indians, used for bucklers.

Thus we see that these sequestered animals, although inhabiting the solitary recesses of the largest rivers in the most unfrequented parts of the globe, are not devoid of utility to man.

In surveying those numerous tribes of animals, of which some are so perfectly adapted to afford us their assistance in labour, or to supply us with food and clothing; and others so admirably calculated to gratify our curiosity, and excite rational beings to contemplate the greatness and goodness of the Author of Nature, who has created so many subordinate beings, endowed with qualities so essential to our comfortable existence, that we cannot but learn the divine lesson of gratitude to the bountiful Giver of all good things. A little reflection will enable us to perceive, that to treat with kindness the creatures subject to our domination, and committed to our charge, is the most rational and appropriate demonstration of our gratitude to the Creator of the universe, and Common Parent of all, for his kind attention to our comforts and conveniences.

After exhibiting to view the nature, the habits, and utility of these different kinds of animals, which, being domesticated among us, and necessary to our service and support, induce us to consider their welfare as connected with our own, we have been led to range among the wilder inhabitants of the forests, the mountains, and the deserts, which, although less dependent on man, are frequently the objects of his pursuit, and become subservient to his interests. Having followed Nature to her most retired recesses, and seen and admired the works of the Creator, displayed in a variety of the most useful, the most beautiful, and the most inoffensive animal forms, we shall now be engaged in a different pursuit, and occupied with the contemplation of a new scene.



CHAPTER XVI.

THE CAT KIND.

“Around in sympathetic mirth
Its tricks the kitten tries.”—GOLDSMITH.

OUR attention is now called to a numerous, ferocious, and sanguinary tribe, engaged in unceasing hostilities against man, and against all those animals that are in alliance with him, and

under his dominion and protection. This numerous and ferocious race, which by most naturalists is denominated

THE CAT KIND,

Is distinguished by their formidable claws, which are capable of being drawn in, or extended at pleasure. They lead a solitary life, prowling about for prey, and, instead of uniting in herds like the herbivorous kinds, they ramble about alone in search of food, and are generally enemies to one another. Although greatly differing in size and in colour, they all correspond in form and in disposition: they are equally fierce and rapacious, and all of them carnivorous; the common Cat, through habits of domestication, is brought to eat farinaceous food, but never prefers it; and all other animals of the cat kind refuse the aliment that is not tinged with blood.

We begin the description of this race, with this common domestic animal the Cat—the only one of the tribe that has been taken under human protection.

THE CAT

Is, when young, of all animals the most sportive and playful; but as its years increase, it begins to grow more serious, and also more artful.

Any description of an animal so universally known, and of which the habits and propensities are exposed to daily observation, would be superfluous: we may, however, observe, that although cats cannot absolutely see in the dark, as is often asserted, yet they see much better in the twilight, or when it is dusky, than in the broad day-light. During the day, the pupil of this animal's eye is contracted, but in the dusk it resumes its natural roundness. It then enjoys perfect vision, and takes advantage of it to discover and seize its prey.

The nocturnal meetings of these creatures, seem a curious peculiarity. They call one another together by loud cries, and sometimes meet in great numbers. When they are met, they look at one another in a menacing manner, writhe themselves into a thousand threatening postures, and, without any apparent cause, fly upon one another with the most furious rage, with teeth and claws indiscriminately wounding and lacerating one another.

These furious engagements never happen but in the night: they sometimes continue several hours, and the most horrid squalls accompany them through the whole time of their duration.

The cat is fond of certain perfumes, and is particularly attracted by the smell of valerian: it has a remarkable aversion

to mire and water, and is a handsome, cleanly, and agreeable creature.

The perseverance of the cat in watching its prey is remarkable, and indeed extraordinary. This animal loves to bask in the sun-shine, and is exceedingly fond of sitting by a warm fire; so that from these circumstances, one might naturally suppose it to be unable to bear the cold; and yet, in watching its prey, it will frequently sit motionless several hours together among snow in the severest weather.

Some naturalists have treated the cat somewhat hardly in their descriptions, and have represented it as insensible of kindness, and incapable of attachment, which is certainly a mistake. It is as much attached to its master as any other animal, except the dog, and expresses its affections by the most engaging caresses, and the most agreeable purring. It is also reproached with treachery and cruelty—but are not the artifices which it uses the particular instincts which the all-wise Creator has given it, in conformity with the purposes for which it is designed? Being destined to prey upon so lively and active an animal as the mouse, which possesses so many means of escape, it is requisite that it should be artful; and indeed the cat, when well observed, exhibits the most evident proofs of a particular adaptation to a particular purpose, and the most striking example of a peculiar instinct suited to its destination.

A celebrated writer says, that “the cat is one of those animals which has made the least return to man for his trouble by its services;” but it is certain, that it renders very essential services to man, and merits well his kindness and protection. Authors seem to delight in exaggerating the good qualities of the dog, while they depreciate those of the cat: the latter, however, is not less useful, and certainly less mischievous, than the former. The delight, however, which this animal takes in sporting with the unfortunate victim that falls under its power, in prolonging its tortures, and putting it to a lingering death, it must be confessed is not a very favourable trait of its character.

The cat is very much attached to the place where it has been brought up, or long made its abode; and instances frequently occur, of cats having returned to the place from whence they had been carried, although at several miles’ distance, and even across rivers, when it was impossible that they should have had any knowledge of the road.

In former times, this animal was held in so high estimation, that its preservation constituted, in some countries, an object of public attention. In the reign of Howel, the good king of Wales, who died A. D. 948, laws were made to fix the price of

valuable animals, among which the cat was included, on account of its utility and scarcity. The price of a kitten, before it could see, was fixed at one penny: after its eyes were open, which is in the space of eight or nine days from its birth, it was advanced to two-pence; and as soon as proof could be given of its having caught a mouse, its value was, in consequence of that exploit, rated at four-pence; a very considerable sum in those days, when money was so exceedingly scarce, being at least equivalent to the price of a good sheep.

By the same laws, if any one should steal or destroy a cat that guarded the prince's granary, he was to expiate the crime by the payment of as much wheat as would form a heap high enough to cover the cat's tail when it was suspended by it with the nose touching the floor, or by the forfeiture of a good ewe, with her fleece and lamb. It was likewise provided, that when a cat was sold, its sight and hearing should be perfect, and its claws whole, and if a female, a good nurse to kittens: if any defect were found in regard to these qualities, the seller was to forfeit to the buyer one-fourth part of the price.

From these circumstances, it appears, that the cat was not originally a native of Great Britain, and that great pains were once taken to preserve and improve the breed of an animal which is now grown so common, that it is held in less estimation than it deserves.

It is a disagreeable but just observation, that in many cases the favours of Providence excite not only less admiration, but also less gratitude, from being liberally bestowed and plentifully diffused.

The maternal affection of the cat is very remarkable, and she has frequently been known to nurse the young of other animals with the utmost care and tenderness.

In the Naturalist's Calendar, a very curious circumstance of this nature is stated: "A boy had taken three young squirrels in their nest, put them under a cat which had recently lost her kittens, and found that she suckled them with the same affection as if they had been her own progeny. But so many persons flocked to see this phenomenon, that the foster-mother at length became alarmed for the safety of her charge, and hid them over a ceiling, where one died."

Mr. White, in his Natural History of Selborne, observes, that he had a little helpless leveret brought to him, which was nourished by the servants, with milk from a spoon; and about the same time his cat kittened, and the young were despatched. The leveret was soon lost, and was supposed to have fallen a prey to some cat or dog; but one evening, about a fortnight afterwards, as Mr. White was sitting in the garden, he observed his cat trot-

ting toward him, and followed by the leveret, which she had nourished with the utmost affection.

When M. Baumgarten was at Damascus, he saw a large house which was solely used as a kind of hospital for cats, and was said to be completely filled with those creatures. On inquiring into the origin of this curious institution, he was informed that Mahomet, when he once resided there, kept a cat in the sleeve of his gown, and fed it carefully with his own hands; in consequence of which, his followers in this place paid the most superstitious respect to these animals, and supported them in this manner by public alms, which were very adequate to the purpose.

THE WILD CAT

Is so intimately allied to the domestic kind, that they evidently constitute the same species. The form is the same in both, and they exhibit the same characteristic propensities: the only observable distinction is, that the wild cats are larger and stronger than the tame kind, and their fur is much longer, but very soft and fine.

The province of Chorazin, in Persia, is famous for a beautiful species of this animal: its size is about the same as that of our common cat: its colour is of a fine grey, and its fur cannot be exceeded in softness and lustre: its tail is long, and covered with hair of the length of five or six inches: it frequently turns it upon its back like a squirrel, and it then resembles a plume of feathers.

The cat of Angora is larger than the common wild cat. Some of these creatures are white, and others of a dun colour; and all of them have a ruff of long hair round the neck, which gives them the appearance of small lions.

Wild, as well as tame cats, are found with very little variety in almost every climate, and in almost every country of the old and the new continent. This animal is indeed extensively diffused, and existed in America before its discovery by the Europeans.

In England, the wild cat is not very common, although some of an enormous size have been taken: one was killed in the county of Cumberland, which measured above five feet in length, from the nose to the end of the tail.

Wild cats always inhabit mountainous and woody tracts; where they live in trees, and hunt for birds and small animals. They sometimes sally from their retreats, and make great havoc among poultry: they will kill young lambs, kids, and fawns, and are exceedingly destructive among rabbits in the warrens.

A tradition is extant, of a serious conflict which once took

place at the village of Bamborough, in Yorkshire, between a man and a wild cat. It is said that the fight commenced in an adjacent wood, and was continued from thence into the porch of the church, where it ended fatally to both combatants, for each died of their wounds. A rude painting in the church commemorates the event, and some of the stones are said to be tinged with bloody stains, which the properties of soap and water have never been able to obliterate. In all probability, however, these stains are merely imaginary, as the natural tinge of the stones may be of a red colour.



CHAPTER XVII.

..... "There sublim'd
To fearless lust of blood, the savage race
Roam, licens'd by the shading hour of guilt."—THOMSON.

IN proceeding with the survey of this ferocious tribe of animals, we will begin our ramble among the weaker sort of those which are usually denominated the cat kind, and which, if through a deficiency of strength, they are less to be dreaded than those of a larger size, possess the same ferocity of disposition as the most formidable. Among these are indeed some most beautiful forms, but all characterized by the same propensity to carnage and blood. This observation, in the first place, is found verified in

THE OCELOT.

This animal, when it has taken its prey, is said to prefer the blood before the flesh. A male and a female ocelot, which had been taken very young, were some years ago brought to Paris. At the age of three months, they became so strong and fierce, as to kill a bitch that had been put to them as a nurse. A live cat being thrown to them, they immediately killed it, and sucked the blood, but would not eat the flesh. The male never allowed the female to partake of his food until he had satisfied his own appetite.

One of these animals, exhibited at Newcastle, although extremely old, showed evident marks of untameable ferocity. It was kept closely confined, and would not admit of being caressed by its keeper, but growled continually, and always appeared in motion.

The ocelot, especially the male, is extremely beautiful, and its fur is most elegantly variegated. Its general colour is a bright tawny: its forehead and legs are spotted with black, and a stripe

of the same colour extends along the top of its back from head to tail. Its shoulders, sides, and rump, are beautifully marbled with long stripes of black, forming oval figures, filled in the middle with small black spots, and its tail is irregularly marked with similar spots. The colours of the female are less vivid, and also less beautifully arranged, than those of the male. In shape, this animal resembles the common cat, but is much larger, being, according to Buffon, two feet and an half high, and four feet in length.

The ocelot is a native of South America, and is also found in North America. It lives chiefly in the mountains, and conceals itself in the leafy tops of trees, from whence it darts upon such animals as come within its reach. It sometimes stretches itself along the branches, as if it were dead, till the monkeys, prompted by their natural curiosity, come within its reach, and experience the fatality of their mistake.

THE MARGAY

Is smaller than the ocelot, being nearly of the size of the wild cat, which it resembles in its habits and characteristic propensities. It is sometimes called the Cayenne cat, and is common in Brazil, and various parts of South America. Several species of this animal are found in India, and in the southern parts of Africa; but these in general have been so negligently observed, or so injudiciously represented by travellers, as to render it impossible, from their relations, to form any perfect description of this animal, which constitutes one of the many desiderata of natural history. Its colours vary, but in general it is tawny, the face and body marked with stripes and spots of black, the breast and insides of the legs white, and spotted with black, and the tail long and alternately spotted with grey, black, and tawny. On the whole, the margay is a most beautiful animal. In some parts, it is known by the name of the tiger-cat.

THE SERVAL

Is another quadruped of the cat kind, that inhabits the mountainous parts of India. It is also a beautiful animal, somewhat larger than the wild cat. The general colour is a pale yellow, but white on the belly and breast: its whole body is variegated with black spots, equally distributed in every part: its eyes are extremely brilliant and piercing, its tail short, and its feet armed with long hooked claws.

It is extremely fierce, but avoids mankind, unless provoked, when it darts furiously on the offender, attacking him with teeth and claws, in the same manner as the panther. It is seldom seen on the ground, but lives chiefly in trees, where it makes its nest,

and breeds its young. It feeds on young birds, and leaps with great agility from tree to tree.

THE CONGUAR

Is a native of the continent of America, and is by some called the American lion, although little resembling that animal. Its head is small, and it has no mane: its predominant colour is a lively red, mixed with black, especially on the upper parts of the body, but the inferior parts are whitish: its legs are long, and its claws white. It is about five feet in length from the muzzle to the tail; and its tail is about two feet long.

It is found in many parts of North America, where its ferocity seems to be subdued by the climate; for it will fly from a dog, and run up a tree for safety. It is common in Guiana, Brazil, and Mexico; and in those hot climates is fierce and ravenous in the extreme. It will swim rivers to attack cattle even in their enclosures; and is very destructive to hogs, as well as other domestic animals. It is also a terrible enemy to the moose, and other deer, and will even attack beasts of prey. It lies lurking in the top of a tree, till some animal passes underneath, when it drops down upon it, and never quits it till it has drank its blood. The conguar, although so ferocious in its natural state, is, when taken and tamed, almost as gentle as a domestic cat, allowing itself to be caressed, and will even permit children to mount on its back: it purs like a cat, and when angry, or oppressed with hunger, sometimes howls dreadfully.

THE BLACK TIGER

Differs from the last described animal chiefly in its colour, which is dusky, and in some of the species spotted with black. The inferior parts of the body are of a palish cast, the upper lip white, and covered with long whiskers. Above each eye it has very long hairs, and at the corner of the mouth a black spot. It grows to the size of a heifer of a year old, and has remarkable strength in its limbs.

M. de la Borde says, that these animals are excellent swimmers, and that they frequent the sea-shore, and eat the eggs deposited there by the turtles. They likewise destroy alligators, lizards, and fish. In order to catch the alligators, they lie down on their bellies at the edge of the river, and strike the water to make a noise. The alligator then raises its head above water, in expectation of its prey, but they dart their claws into its eyes, and drag it on shore, where it falls a victim to the animal on which it intended to feast; like wicked men, who frequently fall into the snares which they have laid for others, and draw upon themselves those calamities which they designed to inflict.

The black tiger inhabits Brazil and Guiana, where it is much dreaded by the natives. It is, indeed, a ravenous and ferocious animal, but fortunately the species is not numerous.

THE LYNX.

This name appears to have been given by the ancients to a creature which existed only in imagination, and had no existence in the system of Nature. To this imaginary creature they attributed extraordinary qualities, and in their fabulous descriptions represented its sight so piercing, as to penetrate stone walls, and every other opaque body.

The real lynx, however, which Nature, and not imagination, has formed, is found by naturalists to be a very different animal from that which a poetical fancy had created. It possesses none of those extraordinary qualities attributed to it by the ancients. Its eyes are indeed extremely brilliant, which, with the sprightliness of its air and aspect, aided by a little exaggeration, might furnish poetry with striking similies and beautiful allusions.

The lynx differs considerably from every other animal of the cat kind. Its distinguishing characteristic is the length and erect position of the ears, which are ornamented at the end with a tuft of long black hair. The length of its body is upwards of four feet, and that of the tail not above six inches. Its hair is long and soft, and marked with dusky spots, which vary in colour according to its age. Its legs and feet are thick and strong, and its eyes of a pale yellow.

The fur of this animal is valuable for its warmth and softness. Great quantities of it are imported from the northern parts of Europe and America; and the farther north the animals are taken, the more beautiful is their fur, being whiter, and the spots more distinct. It may also be observed, the winter furs are thicker, more glossy and beautiful, than those which are preserved in the summer season.

In hunting for its prey, the lynx frequently climbs to the tops of the highest trees; and neither weazles, ermines, nor squirrels, are often able to escape it. It watches for the fallow deer, the hare, and other animals; darts down from the branches where it lies concealed, seizes them by the throat, and sucks their blood; after which it leaves them, and goes in search of fresh game. It is consequently a very destructive animal, as it is not easily satisfied with carnage, and sometimes makes great havoc among the flocks. When attacked by a dog, it lies down on its back, and defends itself desperately with its claws, and in this posture frequently repels the assailant.

The lynx is common in all the northern parts both of the old and the new continent. It is seldom found in very warm coun-

tries, but prefers the cold regions of the north to temperate climates. It exists, however, in the forests of Germany; but the largest and most beautiful of these creatures are taken near the lake Balkash, in Tartary, where a small skin is commonly sold for a pound sterling. The lynx is said to be a long-lived animal.

THE CARACAL

Very much resembles the lynx, but yet appears to be of a different species, as it is never found in the countries which the former inhabits. It exists only in hot countries, where it generally attends the panther, the ounce, and the lion, especially the last, and lives almost entirely on the refuse of their prey. It is commonly called the lion's provider, and is supposed to be employed by the lion to hunt for his prey by the scent, which in this animal is exceedingly acute.

THE YAGUAR

Is an inhabitant of South America, where it is known by the name of the puma; it is extremely fierce, and, when impelled by hunger, will venture to attack men. It appears to be the most formidable animal of the new continent; and the natives are exceedingly afraid of it. In travelling through the forests of Guiana, they light great fires in the night, at which these, and indeed all wild animals, are extremely terrified.

This animal, which is found only in the hottest parts of South America, has by some been confounded with the panther, and by others with the tiger—of the former of which it may not improbably be a species; but it is very much inferior to the latter, both in strength and ferocity. The skin of the yaguar much resembles that of the panther: its colour is a bright tawny: the top of the back is marked with long stripes of black, and the sides are beautifully variegated with irregular oblong spots of the same colour, open in the middle: upon the whole, it appears so nearly to resemble the panther, that those naturalists who have classed it in the same kind, cannot be accused of any egregious mistake.

THE OUNCE

Is also, by some writers, confounded with the panther, to which, indeed, it bears no small resemblance in the arrangement of its spots. It is, however, much inferior in size, seldom exceeding three feet and a half in length; its hair is longer than that of the panther, as is also its tail considered in proportion to its size. Its colour is also somewhat different, being a light grey, tinged with a yellow cast.

This animal seems to be more generally diffused than the

panther; for it is common in Barbary, Persia, and China, and is sometimes trained for hunting. When accustomed to subjection, it is exceedingly gentle. The hunters carry it with them on horseback, and have it as much under command as a setting dog; when sent out it will return at a call, and jump up behind its master.

The scent of this animal is inferior to that of the dog. It hunts solely by the eye, and is not sufficiently swift to overtake its prey in a long chase; but it is exceedingly nimble in leaping. It frequently climbs trees to place itself on the watch, and suddenly to dart upon such animals as it sees passing.

THE LEOPARD.

This beautiful, but ferocious animal, is an inhabitant of the interior parts of Africa, where the species most abounds; but it is also found in several parts of India, China, and Arabia; and is hunted for its flesh as well as its skin, which is exceedingly beautiful, being of a fine bright yellow, thickly diversified with small black spots, disposed in clusters highly ornamental. When brought to Europe, the skins of these animals are greatly esteemed.

Their flesh is said to be as white as veal, and well tasted; it is much relished by the negroes, who frequently take them in pitfalls, covered at the top, and baited with a morsel of some kind of flesh. The female negroes make collars of their teeth, which they wear as charms, and to which their imagination, clouded by ignorance, and influenced by superstition, its natural concomitant, has induced them to attribute extraordinary virtues.

When these animals cannot find a sufficient supply of food in their native solitudes, in the uncultivated parts of Africa, they frequently come down in great numbers into the Lower Guinea, where they make horrible devastations among the herds of cattle which cover the plains of that fertile country, and spare no living creature that has the misfortune to fall in their way.

The late Sir Ashton Lever kept a leopard in a cage at Leicester-house, where it became so tame as always to appear gratified by attention and caresses; testifying its pleasure by purring, and rubbing itself against the bars like a cat. Sir Ashton presented it to the royal menagerie in the Tower, where a person previously acquainted with it, went, after an interval of more than twelve months, and was greatly surprised to find himself recognised by the animal, which began to renew its usual caresses.

In India there is a species of the leopard about the size of a greyhound, marked with spots pretty much like the rest of the kind, but of which the ground colour is a less brilliant yellow, inclining to tawny. This species of leopard is frequently tamed,

and trained to hunt the antelope, and other beasts of the chase. It is carried in a small kind of wagon, chained and hoodwinked, until it approaches the game, when it is unchained and let loose on the pursuit. At first it begins by creeping along close to the ground, squatting and concealing itself as much as possible, until it gains an advantageous position. It then darts on its prey with extraordinary agility, frequently making five or six amazing bounds. If it does not succeed in this first effort, it desists from any other pursuit, and returns to its master.

The general size of the African leopard is nearly that of a pretty large mastiff, and few of them exceed four feet in length.

THE PANTHER

Is equal in size to the largest of our mastiff dogs, but its legs are somewhat shorter—it is consequently larger than the leopard, being frequently from five to six feet long; whereas the latter, as already observed, seldom exceeds four feet. It inhabits Africa, from Barbary to the remotest parts of Guinea: it is absolutely untameable, and when kept under confinement, growls almost continually.

The panther is extremely ferocious, but happily prefers the flesh of brute animals to that of the human species; although when pressed with hunger, it attacks every living creature, without distinction. It takes its prey by surprise, either lurking in thickets, or creeping on its belly until it come within its reach: it will even climb trees in pursuit of monkeys, and other small animals, so that nothing is perfectly secure from its attacks.

The colour of the panther is yellow, of a deep tint on the back, but growing paler towards the belly, which, together with the chest, is white: on the back, sides, and flanks, it is beautifully marked with black spots, disposed in circles of four or five each, with a single spot in the centre: its ears are short and pointed; its eyes fierce and restless; and its whole aspect is marked with the most untameable ferocity.

China produces a most beautiful animal of this kind called the louchu, the skin of which is commonly sold for not less than six pounds sterling. An animal of this species is also found in Tartary, called the baber: it is seven feet long, and extremely ferocious. Its skin is fine, and valued in Russia at a pound sterling.

The ancients were well acquainted with the panther; and the Romans obtained from the deserts of Africa great numbers of these animals for their public shows. Scaurus exhibited an hundred and fifty of them at one time; Pompey, four hundred and ten; Augustus, four hundred and twenty. Panthers must have been at that time extremely plentiful in the northern parts of Africa, and they still swarm in the tropical regions of that continent.

CHAPTER XVIII.

THE TIGER.

..... "The tiger, darting fierce
Impetuous on the prey his glance has doom'd."—THOMSON.

IN our progressive view of ferocious quadrupeds, we are now to proceed to the contemplation of the tiger, one of the most beautiful, but at the same time one of the most rapacious and destructive of the whole animal race. Its propensities, however, show how little a mischievous disposition can be compensated by a beautiful form.

This animal has an insatiable thirst after blood; and even when satiated with food, is not satisfied with slaughter, but, displaying the genuine characteristics of consummate and innate malignity, continues its ravages until objects whereon it may exercise its fury, can no longer be found.

Happily for the rest of the animal race, as well as for mankind, this destructive quadruped is not very common, nor the species widely diffused; being confined to the warm climates of the east, especially India and Siám, although some are found as far north as China. No part of the world, however, is so much infested with tigers as India, nor any part of India so much as the province of Bengal, of which the southern part, towards the mouths of the Ganges, forming a vast labyrinth of woody islands, called the Sunderbunds, may be called the great rendezvous of those destructive animals. This extensive wilderness, according to Major Rennel, is so covered with wood, and infested with tigers, that no attempts have ever been made to clear and settle it; and, indeed, an enterprise of this kind would, in the opinion of those who are best acquainted with the country, be extremely dangerous, and almost impracticable.

The tiger generally grows to a larger size than the leopard or the panther, though somewhat more slender in proportion to its height and length; and its form so completely resembles that of a cat, as almost to induce us to consider the latter animal as a tiger in miniature. The most striking difference which is observed between the tiger and the other mottled animals of the cat kind, consists in the different marks on the skin. The panther, the leopard, &c. are spotted, but the tiger is ornamented with long streaks quite across its body, instead of spots. The ground colour, in those of the most beautiful kind, is yellow, very deep on the back, but growing lighter towards the belly, where it softens to white, as also on the throat and insides of the legs.



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The bars which cross the body perpendicularly from the back to the belly, are of the same beautiful black; and the skin altogether is so extremely fine and glossy, that it is much esteemed, and sold at a high price in all the eastern countries, especially China. The mandarins cover with it their seats of justice, and use it also for cushions and pillows.

The tiger is said by some to prefer human flesh to that of any other animal: it is certain, however, that it does not, like many other beasts of prey, shun the presence of man, and, far from dreading his opposition, frequently seizes him as his victim. These ferocious animals seldom pursue their prey, but lie in ambush, and bound upon it with a surprising elasticity, and from a distance almost incredible. The strength, as well as the agility of this animal, are wonderful: it carries off a deer with the greatest ease, and will even carry away a buffalo. If left undisturbed, it plunges its whole head up to the very eyes into the body of its victim, to satiate itself with the blood. It attacks all kinds of animals, except the elephant and rhinoceros: furious combats occasionally happen between the tiger and the lion, in which both sometimes perish.

The ferocity of the tiger can never be wholly subdued: for neither gentleness nor restraint makes any alteration in its disposition: it appears insensible of the attention of its keeper, and would tear the hand that feeds it equally with that by which it is chastised.

Father Fachard has favoured us with an account of a combat between a tiger and two elephants, at Siam, of which he was a spectator. The heads and trunks of the elephants were defended from the claws of the tiger by a covering made for that purpose. They were placed in the midst of a spacious inclosure. One of them approached the tiger, which was confined by cords, and received two or three heavy blows upon its back from the trunk of the elephant, which beat it to the ground, where it lay for some time as if it had been dead; but although that had much abated its fury, it was no sooner untied, than with a horrible roar it made a spring at the elephant's trunk, which that animal dexterously avoided by drawing it up, and, receiving the tiger on its tusks, threw it up into the air. The other elephant was then allowed to come up, and, after giving the tiger some very heavy blows, would undoubtedly have killed it, if an end had not been put to the combat.

Notwithstanding the determined ferocity of this creature, a sudden surprise has sometimes had an almost miraculous effect in preventing its attack.

Some ladies and gentlemen being on a party of pleasure under a shade of trees on the banks of a river in Bengal, were suddenly

surprised by observing a tiger placing himself in a posture for making the fatal spring. One of the ladies, with amazing presence of mind, seizing an umbrella, and unfurling it directly in the monster's face, it instantly retired. Another party, however, had not the same good fortune, and we cannot, without sorrow, record the melancholy catastrophe.

On the 22d of December, 1792, Mr. Munro, an illustrious character, and three other gentlemen, went on shore on Sauger island, in the East Indies, to shoot deer. They saw several tracks of tigers; notwithstanding, they continued their sport for some hours, and then sat down to rest themselves, after taking the usual precaution of making a great fire, and firing their pieces several times in the air, in order to terrify and drive away any savage animals that might be lurking around. They had but just commenced their repast, when one of their attendants informed them that a fine deer had approached within six yards. The gentlemen instantly seized their guns, when a tremendous roar like thunder was heard, and an enormous tiger sprang on the unfortunate Munro, and carried him off through bushes and every other obstacle, without any apparent difficulty; every thing yielding to his prodigious strength.

In this dreadful emergency, the other gentlemen immediately fired at the beast, and, as it appeared, not without effect, for in a few minutes Mr. Munro rejoined them, covered with blood. They lost no time in procuring medical assistance, but the unfortunate gentleman's skull was so fractured by the teeth of the monster, and his neck so torn by its claws, that he survived but a short time. Thus fell a worthy and gallant officer, who, had he not been cut off by this unfortunate accident, would undoubtedly have rendered the most essential services to his country. This tiger appeared to be not less than four feet and a half high, and nine long; and when he made the fatal spring, his roar was terrible beyond description. Fierce and tremendous as this animal is, the hunting of him is a favourite diversion with some of the eastern princes.

The tigress produces four or five young at a litter, and when robbed of them, her fury rises to the most ungovernable height: regardless of danger, she pursues the plunderers, who are generally compelled to release one of their captives, in order to retard her progress: she has no sooner, however, taken it to the nearest covert, than she renews the pursuit even to the gates of buildings, or the edge of the sea; and when her exertions prove unavailing, she expresses her maternal agony by the most tremendous howlings.



CHAPTER XIX.

THE LION.

“What if the lion in his rage I meet !
 Oft in the dust I view his printed feet :
 By hunger rous’d, he scours the groaning plain,
 Gaunt wolves and sullen tigers in his train.
 Before them death with shrieks directs their way,
 Fills the wild yell, and leads them to their prey.”—COLLINS.

HAVING described the beautiful form and ferocious disposition of the tiger, we shall now proceed to a description of the Lion, which is the noblest and most courageous of all the feline race.

THE LION

May justly be styled the lord of the forest: there, indeed, he ranges uncontrolled; for his roar is so tremendous, that when reverberated by the woods or mountains, it resembles thunder, and all the animal creation flies before it. This roar is the lion’s natural note; for when enraged he has a different growl, which is short, broken, and reiterated. He then lashes his sides with his tail, erects his mane till it stands up like bristles, and his eyes seem to emit sparks of fire.

The form of the lion is a perfect model of strength combined with agility, and at the same time strikingly bold and majestic. His large and shaggy mane encircling his awful front, his ample eye-brows, and fiery eyes, which, upon the least irritation, glow with a fierce and striking lustre, with the formidable appearance of his teeth, altogether form a picture of terrific grandeur, unparalleled in any other species of the animal creation.

The face of the lion is very broad, and quite surrounded with the mane, which gives it a singularly majestic appearance; for the top of the head, the temples, the cheeks, the under jaw, the neck, the breast, the shoulders, the belly, and the hinder part of the legs, are all furnished with long hair, but that on the rest of the body is very short: his tongue is exceeding rough and prickly, and by licking will easily take off the skin of a man’s hand; a circumstance which ought carefully to be guarded against by those who keep lions, or amuse themselves with them, although ever so well tamed; for if this animal once either see or taste blood, his fury is beyond all restraint, and he immediately destroys his victim. Several instances of this kind have been known.

One gentleman in particular kept a lion, which was almost as tractable as a dog, and used to caress his master in the same manner as that animal. The gentleman often used to permit

him to lick his hands, a familiarity against which he was often cautioned by an intelligent friend. Regardless, however, of this warning, and confiding in the attachment of his favourite, he continued the practice, until one time the prickly tongue of the lion fetched blood from his hand, upon which the animal, forgetting his former affection, instantly flew upon his master, and tore him to pieces.

The general colour of the lion is a tawny yellow ; his height from four feet to four feet and a half, and his length eight or nine feet ; but those we see exhibited in this country, are seldom so large. The formation of the eye, in regard to the contraction and dilatation of the pupil, is nearly the same in the lion as in the cat : the former cannot, any more than the latter, bear a strong light, and consequently he seldom appears abroad in the day, but prowls about chiefly at night. As the sight of the lion, notwithstanding the fierce sparkling of his eyes, is observed to be defective, his smelling appears to be less acute ; and as all living creatures avoid him, he is for the most part obliged to have recourse to artifice to take his prey. Like the tiger, therefore, he bounds upon it from some place of concealment, and on these occasions easily makes springs of eighteen or twenty feet. Sometimes he makes two or three of these bounds : but if he miss his object, he gives up the pursuit, returns to his place of ambush, and lies in wait for another opportunity. The lion, as well as the tiger, commonly chooses his lurking-place near a spring, or on the brink of a river, where he may have an opportunity of surprising such animals as come to quench their thirst.

However, although the lion and the tiger have a similar method of watching and seizing their prey, they differ considerably in some of their other characteristics. The natural disposition of the lion is universally allowed to have more of magnanimity, and contempt for inferior enemies, than that of most other large and predatory animals. This has induced many persons to relate wonderful, and, in some instances, altogether incredible stories respecting this royal beast. "A Jacobin monk of Versailles," says the Pere Labat, "being in slavery at Mequinez, resolved, with a companion, to attempt his escape. They got out of their prison, and travelled during the night only, to a considerable distance, resting in the woods by day, and hiding themselves among the bushes. At the end of the second night, they came to a pond. This was the first water they had seen since their escape, and of course they approached it with great eagerness ; but when they were at a little distance from the bank, they observed a lion. After some consultation, they agreed to go up to the animal, and submissively to implore his pity ; accordingly they kneeled before the beast, and in a mournful tone related their

misfortunes and miseries. The lion, as they told the story, seemed affected at the relation, and withdrew to some distance from the water. This gave the boldest of the men an opportunity of going down to the pond, and filling his vessels, while the other continued his lamentable oration. They afterwards both passed on their way before the lion, which made no attempt whatever either to injure or molest them." The story, as thus related by two superstitious old monks, is too ridiculous to obtain any credit as to the motives which induced the animal to such a mode of conduct. It, however, may be considered to rest on a better foundation, when it is observed that the lion might have had his appetite fully satisfied previously to their appearance, and at that moment been too indolent to attempt to injure them. His retiring at the relation of their story, was no doubt to suit his own convenience, only thus interrupted as he was by the wanderers.

Of the generosity of the lion, many instances stand on record. Every scholar is acquainted with the story of Androcles, the Roman slave, who, being ill-treated by his master, the proconsul of Africa, escaped into the desert, where, exhausted with hunger and fatigue, he took up his lodging in a cavern, which, contrary to his expectation, proved to be a lion's den. He had not remained long, before an enormous lion entered. Androcles found it impossible to escape, and gave himself up for lost. The lion approached him, but instead of devouring him, held up his foot, which was wounded and bloody, and made a growling complaint, as if he craved the man's help. Androcles, considering that nothing could add to the danger of his situation, with a courage that despair excited, and undoubtedly with a trembling hand, laid hold of the lion's foot, and drew out a large thorn, which had been the cause of his pain. The beast, finding himself much eased, caressed the man who had rendered him this service, then laid down and slept beside him. The next night the lion went out again, found some prey, brought it home, and laid it at the feet of his benefactor. A perfect familiarity commenced between Androcles and the lion, and in this manner they lived three years. At the expiration of this period, the slave, knowing that the term of his master's proconsulship in Africa was expired, and supposing that he himself was forgotten, left the den in the lion's absence, and made his way to the Roman colony; but being unfortunately recognised for a runaway slave, he was taken and sent to Rome to his master. By the Roman laws the master was invested with absolute power over his slaves, and this unfeeling barbarian ordered Androcles to be thrown to the wild beasts in the amphitheatre. No sooner was the poor slave placed in this dreadful situation, than he was approached by an enormous lion, which, as both he himself, and the specta

tors of this interesting scene supposed, was to bury him in its voracious stomach. At the moment, however, when the people expected to see the terrible creature open his tremendous jaws to devour his victim, he, to every one's surprise, fell down at the man's feet, and began to fawn upon him like a spaniel. Androcles then recognised him to be the identical lion with which he had lived so familiarly in Africa, which, having been unfortunate like himself, had been taken, and carried to Rome for the public shows.

This happened in the reign of Caligula, and that emperor being informed of so extraordinary a circumstance, obliged the cruel master to liberate the slave. By the emperor's order the lion was also given to Androcles, who traversed the streets of Rome attended by his old friend. The lion would never leave him; but constantly accompanied him, and proved to the man a source of wealth, by the emoluments which it procured him for the gratification of public curiosity.

A remarkable instance of recollection and grateful attachment is related, by Mr. Hope, of a lion belonging to her grace the Duchess of Hamilton:—"One day," says our author, "I had the honour of dining with the Duchess. After dinner, the company attended her grace to see a lion fed, which she kept in the court. While we were admiring his fierceness, and teasing him with sticks, to make him abandon his prey, and fly at us, the porter came and informed the Duchess, that a sergeant, with some recruits at the gate, begged to see the lion. They were accordingly admitted at the moment the lion was growling over his prey. The sergeant, advancing to the cage, called 'Nero, Nero, poor Nero, don't you know me?' The animal instantly turned his head to look at him; then left his prey, and came, wagging his tail, to the side of the cage. The man put his hand upon him and patted him; telling us at the same time, it was three years since they had seen each other; that the care of the lion, on his passage from Gibraltar, had been committed to him, and he was happy to see the poor beast show so much gratitude for his attention."

When the lion has become acquainted with human superiority, his courage has been so degenerated, that he has even been scared away with a shout; and in a tame state, we have an instance of one of these animals being overcome by a goat. Mr. Bruce, commander-general of the Senegal company on the coast of Africa, had near him a full-grown tame lion, when a flock of goats was brought that had been just purchased. They were so terrified at this enormous animal, that all of them ran off except one; but he, looking stedfastly at the lion, stamped with his foot upon the ground in a menacing attitude; then retreated three

steps, and, instantly returning, struck the lion's forehead so forcibly with his horns, that the animal was nearly stunned. The goat repeated his blow several times, and the lion was thrown into such confusion, that he was at length obliged to conceal himself behind his master.

The lion is sometimes held at bay a considerable time by the buffalo; and it is not always that he proves victorious over other animals, as will appear from the following anecdote:

A Florentine gentleman had a mule so exceedingly vicious, as to be altogether ungovernable, from its kicking and biting every person that approached it. He ordered it to be turned into the court of his menagerie, and a lion to be let loose upon it. The lion roared aloud when he first observed the animal; but the mule, without seeming at all alarmed, ran into a corner of the court, and so placed herself that she could only be attacked in the rear. In this situation she waited the onset, at the same time watching with the greatest attention all the motions of her adversary. The lion, aware of the difficulty, used all his art, but to no purpose, to throw her off her guard. At last the mule, seizing a favourable opportunity, gave him such a salute in the face with her hind-feet, as to beat out eight or ten of his teeth; and to compel the animal to retire to his lodge, without making any further attempts to seize upon her, thus leaving her in quiet possession of the field.

It is a vulgar error, that the lion is alarmed at the crowing of a cock. He is, however, said to be frightened at the appearance of serpents near him. Some of the Moors, induced by this notion, when they are pursued by a lion, are said occasionally to loose their turban entirely out, and wave about the twisted linen so as to make it appear like a serpent. The *Sieur Frejus*, in his *Travels in Mauritania*, informs us, that this will always have the desired effect of driving the animals away.

The lion is a long-lived animal, although the precise period of its existence is perhaps unknown. By *Buffon*, it is limited to twenty or twenty-two years; but it is certain, that its life is of much longer duration. The great lion called *Pompey*, which died in the Tower, A. D. 1760, was known to have been there above seventy years; and another, brought from Africa, died in the same place, at the age of sixty-three.

The lioness goes five months with young, and produces three or four at a time. She is smaller than the lion, and not so fierce, except in defence of her whelps, or in procuring them food, in which cases she is not inferior to the lion in ferocity, nor less to be dreaded.

The influence of climate which is so visible in the whole animal race, is strikingly conspicuous in the lion species.—Exces-

sive heat appears essential to the perfection of its size, strength, and courage. The hottest regions of Asia and Africa seem to be its native soil. In the scorched plains of the torrid zone, in the immense deserts of Zaara and Biledulgerid, and in the other interior parts of Africa, lions are the most numerous, as well as the most formidable. In those desolate regions this animal reigns sole master. As a proof of the congeniality of intense heat to this animal's nature, it is sufficient to observe, that in the same latitude the lions which inhabit the mountainous parts where the air is cooler, have neither the strength nor the courage of those which are found in the plains; and those which are bred in temperate climates, are not near so formidable as those which are produced under the burning sun of Africa, where their fury is tremendous, and their courage undaunted. The lion of the desert is not intimidated by the presence of men, nor terrified even by their numbers. A single lion has been known to attack a whole caravan. Having never experienced the arts and combinations of man, they are under no apprehensions of his power.

M. Buffon supposes that the species is reduced to the fiftieth part of its former number. The Romans undoubtedly contributed very much to its diminution in the northern parts of Africa. Mr. Shaw observes, that they carried more lions from Lybia to Rome in one year for their public spectacles, than could now be found in all that country. It is also remarked that in Turkey, Persia, and India, lions are not so common as formerly.

The interior of Africa is at this time the grand central resort not only of this, but of all other ferocious animals, with the sole exception of the tiger, which is a native of India, and the countries beyond the Ganges; and, according to M. Rennel, and other intelligent writers, maintains the exclusive possession of the Sunderbunds of Bengal.

Among the colonists at the Cape of Good Hope, hunting the lion is a favourite diversion. In the day-time, and on the open plain, twelve or fourteen dogs will master a huge lion. Although the strength of this animal is so great, that one of them has been known to seize a heifer, carry it off with ease, and even when holding it in his mouth, to leap over a ditch apparently without any difficulty, yet it is not very fleet in running. In hunting, therefore, the dogs soon come up with him: the lion, then, with a kind of sullen disdain, turns about and waits the attack, shaking his mane, and roaring with a short and broken growl. The dogs then rush on him on every side, and tear him to pieces. The flesh of the lion is said to have a strong and disagreeable flavour, but, however, it is frequently eaten by the negroes; and the grease, which is of a penetrating nature, is of use for medical purposes.

The Moors use the skin of the lion as quilts for their beds. It is said to have the remarkable property of keeping rats or mice out of any room where it is deposited, for a considerable length of time after it is taken from the animal.

We have now ranged through the deserts and the forests, to survey that ferocious tribe of animals, which are terrible to man, as well as other creatures. In these, as in all others, the power of the Creator is conspicuous, although exhibited in forms of terror. This question may here naturally arise: How is it consistent with infinite goodness, that animals should devour one another, and be supported at the expense of one another's lives? To judge whether this system of predacious violence among animals can, even according to our limited view of the consequences, be deemed a real evil, we ought to take the following circumstances into consideration.

In the present state of things, immortality is out of the question: the universal law of Nature ordains, that whatever lives, must die; and it does not appear that the alteration of this law could add to the happiness of the animated creation.—To man, the present life, in which evil is invariably mixed with good, is only probationary, and preparatory to another and happier state of existence, where evil shall be excluded, and felicity be permanent and without alloy. To other creatures life is a blessing, which they enjoy for a time without any apprehension of its termination, or any anxiety for future occurrences. The present moment limits the sphere of their pleasures and their pains, as well as the extent of their hopes and their fears. The system of prey among animals, like the impulse of interest among men, is a spring of activity and motion: pursuit forms the employment, and seems to constitute the pleasures, of a considerable part of the animal creation; defence, flight, or instinctive precaution, is also the principal business of another part; and even in regard of the latter tribe, we have no reason to suppose that their happiness is much disturbed by their apprehensions. Their danger, it is true, continually exists, and Nature has endowed them with an instinctive sagacity, which renders them so far sensible of it as to provide against it in the best manner they are able; but it is only when the attack is actually made, that they appear to suffer from their situation.

To contemplate the insecurity of their condition with anxiety and dread, requires a degree of reflection which the compassionate benevolence of the Creator has kindly refused to them; thus graciously providing that their present safety may not be disturbed with the apprehensions of future danger, nor their immediate

enjoyments embittered by the contemplation of distant calamity. The hare, notwithstanding the number of its dangers and its enemies, is as playful, and apparently as happy, as any other animal, until the very moment that the hounds appear in view.

To this sketch of the Divine wisdom and goodness exhibited in the economy of animal life, we may add another consideration that equally tends to develop the attributes of the Great Author of Nature.

The three modes by which life is terminated, are disease, decay, or violence. The brute creation, living according to the simple dictates of nature, is not very subject to acute diseases; and this must certainly be esteemed a happy circumstance of animal life. But let us consider the state of suffering in which a poor animal is placed, when left to perish by age or decay. Man, in his sicknesses and infirmities, has the assistance of his fellow creatures, who, if they cannot alleviate his pains, can at least minister to his necessities, and supply the place of his own activity; but the brute, in his natural state, does every thing for himself. When, therefore, his strength, his speed, or his senses fail, he is necessarily delivered up either to absolute famine, or to the protracted misery of a life slowly wasted by pain and scarcity of food. May it not then be considered as a benevolent dispensation of Providence, that in the present constitution of things, animals generally either fall victims to one another, or are slaughtered for the sustenance of man; and that few of them, either in a wild or domestic state, suffer the miseries of helpless age and gradual decay?

To these considerations many others might be added, which would appear tedious, and exceed the limits of our present design. Some, indeed, will be brought forward at another opportunity, as we would not weary the attention by too long a confinement to one subject. It is, however, necessary in this place to remark, that by the present constitution of things, a far greater number of creatures enjoy the blessing of existence than could possibly be partakers of it in any other system. If all animals lived on herbage, and their increase were not counteracted by their hostilities against one another, they must have been destroyed by man, or otherwise the productions of the earth could not have supported the immense hordes with which it would long ago have been overspread; and all animated beings must have perished by an universal famine. In the present system of nature, the animal that has for some time enjoyed a happy existence in browsing the herbage, at last becomes food for some other, and thus all find subsistence.

We have expatiated somewhat more largely on this subject, as the circumstance of animals supporting life by devouring one another, forms the chief, if not the only instance in the economy

of Nature, in which the marks of design are evident, but the character of utility obscure. The whole affords a curious subject of contemplation; and although we can only see a very small part in the comprehensive system, impartial reasoning and serious reflection, will render the view of things far different from what it appears to the eye of a superficial observer, and oblige us to exclaim with the poet—

“See and confess one truth must still arise,
’Tis this—though man’s a fool, yet God is wise.”



CHAPTER XX.

THE DOG KIND.

“Of all the speechless friends of man,
The faithful dog I deem,
Deserving from the human clan,
The tenderest esteem.”—HAYLEY.

WE come now to a description of animals, carnivorous indeed, but far less mischievous and dangerous than those which we have last contemplated. These we shall present under the general denomination of the dog kind, which is divided into a number of species, and widely diffused.

THE DOG

Is so well known, that although the race admits of numberless varieties, its external form scarcely requires any description; but its habits and propensities form an interesting subject for the contemplation of the naturalist.

This animal, equally remarkable for its docility, fidelity, and attachment, seems to have been designed by the Author of Nature as an assistant and companion to the human species. In order to accomplish the subjection of the animal creation, it was necessary that man should select some, of which he might make use in the subjugation of the rest; and among all the different orders of animated beings, none was so entirely adapted to this purpose as the dog; for none is so bold and sagacious, so tractable and obedient. To this day he assists man in the destruction of such animals as are hostile to his interests, and in conquering such as contribute to his support or pleasure. The dog, when taken into participation of empire with man, as if conscious of his own importance, exerts a degree of superiority over all animals that require human protection. The flock and

the herd obey his voice : he conducts and guards them, and considers their enemies as his own ; and is equally useful when the sound of the horn, or the voice of the huntsman, calls him to the field.

In his original state of wildness, the dog may probably have been a formidable enemy to man ; although he now seems only desirous to please, and actually possesses all the qualifications, and uses all the insinuating complacences, whereby an animal can conciliate human affection.

In America, especially in those parts which are under the dominion of Spain, wild dogs are exceedingly numerous, and go in large packs, attacking almost every creature that comes in their way. These were originally introduced by the Spaniards, as the dog was not known in any part of that continent before their arrival. The wild dogs, however, when taken, are easily tamed, and soon become obedient and familiar.

To describe, or even to enumerate, all the different kinds of dogs, or the discriminating marks by which each is distinguished, would be not only useless, but impossible. The different breeds are not only innumerable, but, by constant intermixture, perpetually varying ; so that every individual displays something peculiar to itself, in shape, colour, or character. No animal in the creation is so susceptible of change, nor so easily modified by climate, food, and education. We have already observed, that those animals which have been long under human management, never preserve the stamp of Nature in its original purity, like those which enjoy their original independence : as the dog is the constant attendant on man, accompanies him into different climates, and in his society adopts more different modes of living than any other creature, it is not a matter of wonder that this animal should exhibit a greater variety than any other ; and that the influences of so many different circumstances, with the incessant intermixture of breeds, should preclude every possibility of systematic arrangement. We shall therefore content ourselves with pointing out a few of the most striking varieties.

THE SHEPHERD'S DOG

Is generally considered as the parent stock of the canine race. This faithful animal, ever attentive to his charge, reigns over the flock ; and is of the utmost importance in many parts of Great Britain, where extensive tracts of land are solely appropriated to the feeding of sheep and other cattle. This sagacious animal is so obedient to the voice of the shepherd, and so ready to execute his commands ; that in conducting the flock from one place to another, and preventing the sheep from straggling, the services of one well-trained dog will be more effectual than all that

could be performed by two or three men, without mentioning the attentive fidelity with which, in his master's absence, he executes his office of a guardian.

THE CUR DOG,

Although not considered by naturalists as a distinct race, is, notwithstanding, esteemed such in some parts of England, and its utility to the farmer and grazier is so great, that in many places no small attention is paid to the breed. They are extremely useful in driving cattle, and exceed the shepherd's dog in size, fierceness, and strength. Some dogs of this kind possess an astonishing degree of sagacity: they know their master's fields, are attentive to the cattle that are in them, go of their own accord their daily rounds, and if any interlopers have got among the herd, will quickly drive them out of the grounds.

THE GREENLAND DOG.

This race of dogs is generally white; some, however, are spotted, and others black. The Pomeranian, Siberian, Lapland, and Iceland dogs, as well as those which run wild in America, are all somewhat similar to the Greenland dogs in the sharpness of their muzzles, their long shaggy hair, and bushy tails; and all have some resemblance to the shepherd's dog, but are of a larger size. The Greenlanders sometimes eat the flesh of their dogs. They make garments of their skins, and use them for drawing sledges, to which they yoke them, four, five, or six together.

The dogs of Kamtschatka are nearly of the same kind: they are strong and active, and their colour is commonly black and white. They are exceedingly useful in drawing sledges, the only mode of travelling in that country during the winter, and travel with great expedition. Captain King relates, that during his stay there, a courier with despatches performed, in a sledge drawn by dogs, a journey of 270 miles in less than four days. According to Captain King's account, who gives a very interesting description of these animals, they strongly resemble the Pomeranian, or wolf-dog of Buffon, except that they are larger, and covered with coarser hair. That gentleman also says, that although they vary in colour, the greatest number are of a light dun.

Of the fleetness of these dogs, Captain King gives the following account, in addition to the instance already mentioned: "We were ourselves witnesses," says he, "of the great expedition with which the messenger, who had been despatched to Bolcheretsk with the news of our arrival, returned to the harbour of St. Peter and St. Paul, though the snow was at that

time exceedingly soft; and I was informed by the commander of Kamtschatka, that this journey was generally performed in two days and a half; and that he had once received an express from that place in twenty-four hours, although the distance be not less than one hundred and thirty miles."

These useful animals are trained to this business of drawing the sledge, when they are only whelps; and although the most general mode is to yoke five of them together, two and two, with a leader, yet deviations from this method take place according to circumstances. Mr. Lessop informs us, that he and M. Kaslof, governor of Kamtschatka, set out from Bolcheretsk, with their baggage, in thirty-five sledges, drawn by three hundred dogs, and that his sledge was drawn by thirty-seven, and M. Kaslof's by forty-five of these animals. They arrived at Pons-tarisk with no more than twenty-seven out of the whole number, having lost all the rest by the hardships of the journey: from which circumstance we may conclude, that the sufferings of these useful animals are on these occasions very great. Mr. Lessop describes this mode of travelling as very expeditious, but extremely troublesome. He says, the dogs are sometimes very refractory; and that on long journies it is almost impossible to enjoy any repose, by reason of the excessive howling which they make in the night.

In the management of these dogs, great attention is paid to the training of those that are designed for leaders, which are valued in proportion to their steadiness and docility, and one of them is frequently sold for forty rubles, or ten pounds sterling—a great sum in that country.

In driving these sledges, the reins are fastened to a collar put round the neck of the leading dog, and consequently are of little use in directing the rest. The driver has a crooked stick, answering the purpose both of whip and rein, with which, by striking on the snow, he regulates the speed of his dogs. Sometimes he animates them to proceed by his voice; and when they are inattentive to their duty, he chastises them by throwing his stick at them; but at the same time he shows great dexterity in regaining it, which is the greatest difficulty attending his art; for if he happen to lose this instrument, the dogs immediately discover the circumstance, and seldom fail to set off at full speed, continuing to run till their strength is exhausted, or the carriage overturned and dashed to pieces. Upon the whole, it appears from the relations of Mr. Lessop, and others, who have made the experiment, that when many of these sledges travel together, and are necessarily drawn by a great number of dogs, they form a very noisy and tumultuous caravan.

When the summer approaches, the dogs are turned out to

provide for themselves, but they always return to their masters as soon as the cold weather commences, when they are poorly fed with the offals of fish. In this part of the world, fish is a principal article of food, not only of the dogs, but also of the inhabitants.

We have been somewhat prolix in this article of the dogs of Kamtschatka, as it constitutes an interesting circumstance in the history of the animal creation, and affords, in addition to an infinity of others, a striking instance of the wisdom and goodness of the Creator, in thus providing in such various modes for the conveniency of both men and animals in different parts of the globe; for it must be observed, that the people of Kamtschatka would be in a comfortless situation without their dogs; and that these could not well subsist during the winter without their masters, as it evidently appears from their never failing to return as soon as that rigorous season commences.

We shall now proceed to make some remarks on the principal distinctions of the canine race.

THE BULL-DOG

Is probably the most courageous animal that Nature has produced. It is not so large as many other kinds of dogs, but very strong and muscular. Its nose is short, and its aspect fierce. Its courage in attacking the bull is well known, and to the disgrace of humanity has been too often put to the trial. The persevering resolution and ardour of these dogs, is exhibited in an instance which happened some years ago at a bull-baiting in the north of England: A person, confident of the courage of his dog, laid some trifling wager, that he would, at separate times, cut off its four feet, and that, after every amputation, it would attack the bull. The barbarous experiment was tried, and the dog continued to seize the bull in the same manner as if he had been perfectly whole, exhibiting at the same time a striking example of his ferocious courage, and of the barbarity of his unfeeling owner.

The number of this species of dogs is very much diminished, and its total extinction would be a desirable circumstance; for as it always makes its attacks without barking, it is a very dangerous animal, and ought never to be approached by strangers without great caution. However, as the barbarous diversion of bull-baiting is now almost entirely laid aside, the breed of bull-dogs will be little attended to, and probably will be soon lost in the confusion of intermixtures.

The refinement of the last and the present age, has produced a happy effect in abolishing those cruel diversions and savage customs which formerly disgraced human nature. The bull-fights in Spain, and the bull-baitings of England, are now almost

totally disused. The former, however, exhibited a greater appearance of magnanimity than the latter, as in them the amateurs of the sport themselves attacked the bull; while those who delighted in bull-baiting were only stupid starers, who employed their dogs to perform a business which they themselves durst not undertake, and to face an antagonist which they would have trembled to approach.

THE ENGLISH MASTIFF

Was so famous in the time of the Roman emperors, that an officer was appointed to breed and send to Rome such of this species, as might be deemed proper for the combats of the amphitheatre. But the genuine and unmixed breed of these dogs, although not absolutely extinct, is now seldom met with; and most of those distinguished by that name are a compound of different breeds.

The real mastiff is much larger and stronger than the bulldog. His ears are pendulous, his lips large and loose, his aspect sullen, and his bark loud and terrific. The distinguishing characteristic of his disposition is that of being a faithful guardian of property, and suffering no depredation to be committed on the premises where he resides. Dr. Caius, who wrote in the reign of Queen Elizabeth, informs us, that three of these dogs were reckoned a match for a bear, and four for a lion; but from an experiment made in the presence of King James the First, it appeared that a lion was not an equal match for three of them; for although two of the dogs were disabled in the conflict, the third seized the lion by the lip, and held him for some time, until, being dreadfully torn by his claws, he was obliged to let go his hold; and the lion, exhausted by the contest, took a sudden leap over the dogs, and retired into his den. Experiments, however, of this kind, cannot give us any just notion of the proportion of courage and strength between those animals; for it must be considered that the lion in question, besides having lost much of his natural ferocity by the temperature of the climate, had long been in a state of confinement under the subjection of man. It is therefore impossible to ascertain how many mastiffs would be a match for that undaunted animal in his state of natural fierceness, under the burning influence of an African sun, in the deserts of Biledulgerid.

The mastiff, conscious of the superiority of his strength, has sometimes been known to chastise with great dignity the insults or impertinence of his inferiors. An animal of this kind, belonging to a gentleman near Newcastle, had been frequently teased and molested by the barking of a little mongrel; but at length, wearied with such impertinence, he took up the con-

temptible offender in his mouth, and composedly dropped it over the quay into the river, without offering it any further injury.

THE DALMATIAN, OR COACH-DOG,

Is very common at present in England, and is esteemed an elegant attendant on a carriage. It is, however, to be hoped, that the progress of refinement and good taste, will abolish the custom of depriving the poor animal of so useful and ornamental an appendage as its ears, which is so generally practised through the mistaken notion of increasing its beauty. Are not the decorations which Nature bestows on each animal, its greatest ornaments, and is not an adherence to her laws the perfection of taste?

THE IRISH WOLF-DOG

Is the largest of the canine species, and its appearance the most beautiful and majestic. It was peculiar to Ireland, but is now almost extinct. This was, according to Buffon, the famous Wolossian dog of antiquity.

Wolves are no longer to be met with in Ireland; and this kind of dog is unserviceable for hunting either the stag, the fox, or the hare; we need not therefore be at a loss to discover the cause of the breed being neglected: it would, however, be worth preserving, as it is a beautiful animal, its aspect mild, and its disposition gentle. Although it never seeks to quarrel with any other dogs, it is far superior in combat both to the bull-dog and mastiff, exhibiting those characteristic qualities so much to be admired in rational, as well as irrational beings; strength and courage, combined with peaceableness of disposition.

THE HIGHLAND GREYHOUND

Is a large, fierce, and powerful animal. It was formerly much esteemed by the chieftains of Scotland, and used in their grand hunting parties, but is now become rare.

THE COMMON GREYHOUND

Is the swiftest of all the canine race, but as it wants the faculty of scenting its game, it pursues it by the eye. M. Buffon supposes this to be a variety of the Irish wolf-dog, rendered more delicate by the difference of climate and management; and it must be confessed, that both in its form and disposition, it bears no small resemblance to that animal.

Greyhounds were formerly so much esteemed, that by the forest laws of King Canute, it was enacted that no person under the degree of a gentleman, should keep any dog of that kind.

THE BEAGLE

Is the smallest of all the dogs kept for the chase, and is used only in hunting the hare. It is far inferior in speed to that animal, which is the principal object of its pursuit; but by its exquisite scent it traces her footsteps through all her turnings and windings with the greatest exactness, and with wonderful perseverance, until she becomes at length exhausted, and unable any longer to continue her flight.

THE HARRIER

Differs from the beagle in being somewhat larger, as also more nimble and vigorous. It pursues the hare with eager impetuosity, and scarcely gives her any time to breathe; and the most active sportsman finds it sufficient exercise to keep up with the pack. These hounds exert their voices with cheerfulness, and make that lively harmony which has ever delighted the ears of the true sportsman.

THE FOX-HOUND.

Great Britain excels all other countries in her breed of fox-hounds, whether we consider their swiftness, or their perseverance. The climate seems congenial to their nature, for the race is said to degenerate when transplanted into foreign countries; and it is certain, that in no part of the world is there so much attention paid to their breeding and management. This, indeed, is not a matter of wonder, when we consider that the attachment of the English to the chase is so remarkable, as to be reckoned a trait of the national character. This propensity is so prevalent, that scarcely any price is thought too high for hounds of approved excellence.

These dogs are also trained to hunt the stag; and as a proof of their perseverance and spirit in supporting a long continuance of vigorous exertion, it is sufficient to observe, that a large stag having been turned out of Whinfield park, in Westmoreland, was pursued until the whole pack was thrown out, except two staunch dogs, which continued the chase. The stag returned to the park, made his last effort in leaping over the wall, and at the moment he had accomplished it, dropped down dead. The foremost of the two hounds also reached the wall, but being too much exhausted, it lay down and immediately expired; the other, unable any longer to continue the pursuit, fell down dead within a small distance of the place. This is perhaps the longest chase recorded in the annals of stag-hunting. They advanced as far as Redkirk, near Annan, in Scotland, distant from Whinfield park forty-six miles by the post-road, so that the circuitous route they

might be supposed to take, could scarcely be less than a hundred and twenty miles. The horns of this stag, which were the largest ever seen in that part of the country, were affixed to a large tree in the park, in commemoration of this extraordinary chase.

Many other kinds of dogs are used in the sports of the field, and contribute to the innocent and healthful amusements of country gentlemen. Of these we shall observe—

THE ENGLISH SETTER.

This is a handsome and active dog: its use and qualities are well known. Its scent is exquisite, and its sagacity in discovering the various kinds of game, with its caution in approaching them, exhibit a wonderful specimen of animal instinct.

THE SPANISH POINTER

Appears, from the etymology of its name, to have originated from Spain, although it is now naturalized in England, where the greatest attention has been paid to preserve the purity of the breed. It is principally employed in finding partridges, pheasants, &c., either for the gun or the net, and is remarkable for its docility, its aptness for receiving instruction being such, that it may be said to be almost self-taught. In this respect it greatly excels the English pointer, which requires great care and attention in training. A mixed breed between the Spanish and English, is now chiefly used by sportsmen, and these are the setting dogs, which seem to be the most esteemed.

THE LARGE WATER-SPANIEL,

Is chiefly used in discovering the haunts of wild ducks, and other water-fowl; it is fond of water, and swims well. In its disposition it is docile and obedient: its form is elegant; its hair beautifully curled; its ears are long, and its aspect is sagacious and pleasing. These dogs are extremely useful in finding birds that have been shot, or disabled, and fetching them out from places which the sportsman cannot conveniently approach. The small water-spaniel is of a less size, but resembles the other in form, and is of similar habits and disposition.

THE SPRINGER

Is an indefatigable pursuer of its game, and exceedingly active and expert in raising woodcocks and snipes from their haunts in the woods and marshes which they frequent.

Of this kind also seems to be that handsome little animal, known by the appellation of King Charles's dog, the favourite companion of that monarch, who is said to have been generally attended by several of that kind.

Somewhat similar to this, but much smaller, is the shock-dog, a diminutive creature, almost lost in the great quantity of hair, which covers it from head to foot.

Descending still farther, we have a variety of small dogs, such as

THE COMFORTER,

An elegant, but snappish and noisy little animal, and averse to the familiarity of strangers. It is chiefly entertained as an attendant of the toilette, or the drawing-room.

THE TURNSPIT,

A vigilant and spirited little dog, is now but seldom employed, although its services were of great utility before the ingenuity of mechanical improvements rendered them unnecessary. Before the invention of a better method of working the spit, it was curious to observe the labours of this useful little animal.

THE PUG DOG

Is formed exactly in the same manner as the bull-dog, but is much smaller, and its tail curls upon its back. It was formerly very common in England, but now the breed begins to be scarce. Mrs. Piozzi informs us, that she saw great numbers of them at Padua, and that it still maintains its place in the favour of the ladies in that city.

From the mixture of these, and other breeds, we have messets, lap-dogs, dancers, waps, mongrels, and an endless number of varieties and compounds, for which it is difficult to find a name. We therefore proceed to a brief description of those kinds which are of greater note and utility.

THE ROUGH WATER-DOG

Admits of two varieties, one of a larger, and the other of a smaller size; but they are both remarkable for their long shaggy hair, and their aptness to fetch any thing, especially out of the water. They are web-footed, and swim with great ease; they are fond of water, and are extremely useful in hunting ducks, and other aquatic fowl.

THE NEW-ZEALAND DOG

Pretty much resembles the shepherd's cur, and is common in the Society Islands. In those countries, the flesh of their dogs constitutes the principal part of the animal food used by the inhabitants. However disagreeable it may appear to us, dog's flesh was a viand on which the Greeks and Romans did not disdain to feed; and Europeans, who have been able to overcome their

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NEW-FOUND-LAND DOG

Plate 50.

Mier Del.

prejudices, have tasted the flesh of these animals, and found it not unpalatable. Prejudice, in many cases, warps our minds more than we imagine, or perhaps are willing to believe.

THE NEWFOUNDLAND DOG

Is one of the largest, as well as the most sagacious and useful animals of the canine race. The dimensions of one, now or lately kept at Eslington, in Northumberland, the seat of Sir H. G. Liddel, Bart. were, according to Mr. Bewick, as follow: from the nose to the end of the tail, six feet two inches; the length of the tail, one foot ten inches; from one fore-foot over the shoulders to the other, five feet seven inches; girt behind the shoulders, three feet two inches; and round the upper part of the fore-leg, nine inches and a half. It was very fond of fish, and would eat it raw out of the nets. It was web-footed, could swim and dive extremely well, and bring up any thing from the bottom of the water. The extraordinary sagacity of these dogs, joined to their attachment to their masters, renders them, in certain situations, highly valuable, as will appear from the two following well-authenticated anecdotes:

A ship belonging to Newcastle, being wrecked near Yarmouth in a severe storm, A. D. 1789, and all the crew lost, a Newfoundland dog alone escaped to land, bringing the captain's pocket-book in his mouth. He landed amidst a crowd of people, many of whom in vain endeavoured to take it from him. The sagacious animal, as if sensible of the importance of the charge, which had probably been delivered to him by his perishing master, at length leaped fawningly against the breast of a man who had attracted his notice among the crowd, and delivered to him the book. The dog immediately returned to the beach, and watched with great attention for every thing that came ashore from the wrecked vessel, seizing every thing that came up, and endeavouring to bring it safe to land.

As another instance of the docility and sagacity of these animals, Mr. Bewick relates, that a gentleman walking by the side of the river Tyne, and observing on the opposite side a child fall into the water, gave notice to his dog, which immediately jumped in, swam over, and catching hold of the child with his mouth, brought it safe to land.

In the country from whence these dogs were originally brought, and from which they derive their name, they are extremely useful. Three or four of them yoked to a sledge, will draw for several miles two or three hundred weight of wood, without any driver or conductor, and after delivering their loads, regularly return. The Newfoundland dog is indeed a most valuable creature, and we cannot contemplate his astonishing sagacity with

out admiring the wonderful works of the Creator, displayed in the various modifications of animal instinct.

THE BLOOD-HOUND

Is, of all the canine race, the most beautifully formed, and superior to almost every other kind in sagacity. They are generally of a brown, or reddish colour, and seldom bark. These dogs were formerly much used in several parts of Great Britain, that were infested with robbers and murderers, especially on the frontiers between England and Scotland; and their exquisite scent, and wonderful sagacity in tracing the delinquent, are finely depicted by Somerville:—

“Soon the sagacious brute, his curling tail
Flourish'd in air, low bending plies around
His busy nose, the steaming vapour snuffs
Inquisitive, nor leaves one turf untried,
Till, conscious of the recent stains, his heart
Beats quick : his snuffing nose, his active tail,
Attest his joy : then with deep opening mouth,
That makes the welkin tremble, he proclaims
Th' audacious felon.”

For these purposes, the blood-hound is happily no longer necessary; and as its present use is chiefly confined to the recovery of deer, that have escaped, after being wounded by a shot, the breed has become much less numerous than it was in former times.

These considerations, while they excite our astonishment at the wonderful instincts with which the Creator has endowed the animal race, must at the same time inspire us with gratitude for the favours conferred on us by his gracious Providence, in allotting to us our period of existence in an age of civilization, and in a country where a well-regulated government, by the equitable administration of laws, provides for individual security.

We cannot dismiss this subject, without mentioning a custom established in several convents situated among the Alpine mountains, which does honour to human nature. In these sequestered and uninhabited tracts, travellers inform us that a breed of dogs are trained to go in search of persons who have lost their way in those unfrequented regions. They are every morning sent out with an apparatus fastened to their collars, containing refreshments, and written directions to the travellers to follow these sagacious animals to the convent, where they are hospitably entertained. By this singular and humane practice, we are assured that many lives are frequently preserved.

In all the Mahometan countries, dogs are excluded from the habitations of men; while cats, on the other hand, are held in the highest esteem, and indulgently treated in every family. 'The

dogs, therefore, wander about at random in the villages, or streets of great cities, without any owners. The Mahometans, however, are remarkable for their humanity to the brute creation; and if they have an abhorrence for these animals, they at least refrain from doing them any injury, and feed them with the offals of victuals, which they throw to them into the street. This humanity is, indeed, carried to a very great height in some places, especially in Egypt, where dogs are perhaps more numerous than in any other part of the world, and exceedingly useful in destroying a variety of vermin, and devouring the carrion which, in so sultry a climate, soon putrefies. A certain portion of provision is sometimes given them at the public expense; and instances have been met with, of wealthy individuals, who have by will bequeathed a sum of money to be appropriated to the support of these animals.

Although neither the utility nor agreeable qualifications of the dog can be called in question, it must be acknowledged, that, to these it unites some mischievous propensities. If we consider the numberless misfortunes caused by dogs, and that there are many country villages through which a person can scarcely either walk or ride in safety, unless he take great care to avoid being lacerated by their teeth, or thrown from his horse in consequence of their barking; as well as the dreadful effects of canine madness, of which every year furnishes fatal instances; that besides this, it is no uncommon thing among farmers to have ten or a dozen sheep destroyed in one night by dogs, which stroll about from the villages, and very often without being able to discover the delinquent; and if we also consider that many persons keep those dogs who are not in circumstances to make a compensation for the damages they occasion, and some who are scarcely able to procure subsistence for their families, we cannot but think that these animals are somewhat too numerous. We are very far from being advocates for abridging the enjoyments of the poor, whether consisting in substantial benefits, or the gratification of fancy, and should be happy to inculcate an universal sentiment of benevolence towards the animal creation; but a medium ought always to be preserved; and no species of brutes ought to be multiplied to the detriment of human society.

CHAPTER XXI.

THE WOLF.

"By wintry famine rous'd, from all the tract
Of horrid mountains, which the shining Alps
And weary Appenines and Pyrennees,
Branch out stupendous into distant lands;
Cruel as death and hungry as the grave,
Burning for blood! boney, and gaunt and grim,
Assembling wolves in raging troops descend."

THOMSON.

FROM contemplating the varied utility of the dog, his instinctive sagacity, his firm attachment and pleasing qualities, which endear him to man, our attention is now called to an animal, which, in its exterior form and internal structure, exactly resembles the canine race, but possesses none of its agreeable dispositions, or useful propensities.

THE WOLF

Has, in all ages, been much detested, and is universally considered as the most savage enemy of mankind that exists in the animal creation.

The appetite of the wolf is excessively voracious. Although naturally somewhat timid, it becomes, when pressed with hunger, courageous from necessity, and braves every danger.

In countries where wolves are numerous, whole droves come down from the mountains, or out of the woods, and join in the work of general devastation. They attack the sheep-folds, enter the villages, and carry off sheep, lambs, hogs, calves, and even dogs, for at such times, every kind of animal food is equally agreeable. The horse and the ox, the only tame animals that can make any resistance against these destroyers, are frequently overpowered by their numbers, and their incessant attacks. Even man himself, on these occasions, falls a victim to their rapacity. They are seldom driven back until many of them be killed; and when obliged to retreat, soon return to the charge; for when their necessities are urgent, they become infuriate, and instead of being intimidated by opposition, will rush upon certain destruction. They are particularly fond of human flesh, and if they were sufficiently powerful, would probably eat no other. Those that have once tasted it, ever after particularly seek to attack mankind; and choose to fall on the shepherd, in preference to the flock.

So insatiate is the appetite of the wolf, that to allay his hun-

ger, he will sometimes fill his stomach with mud; and although Nature has endowed him with every thing that can fit an animal for the pursuit and seizure of its prey, as well as with the capability of subsisting a long time without food, it is often his fate to perish with hunger; for, being driven by man into the sequestered retreats of forests and mountains, the wild animals escape him by their swiftness or artifice, and those he can take are not sufficiently numerous to satisfy the cravings of his voracious stomach.

About the year 1764, an animal of this kind committed the most dreadful ravages in some particular districts of Languedoc, and soon became the terror of the whole country. According to the accounts given in the *Paris Gazette*, he was known to have killed twenty persons, chiefly women and children; and public prayers are said to have been offered up for his destruction.

That wolves were once an exceeding great nuisance in England, is evident, from the rewards formerly given for their destruction; but the race has there been long since extirpated. King Edgar attempted to effect this beneficial purpose, by remitting the punishment of certain crimes, on producing a specified number of wolves' tongues; and in Wales, certain taxes were commuted for an annual tribute of wolves' heads. Some centuries afterwards they increased to such a degree, as to become an object of the attention of government, and great rewards were given for destroying them. Camden informs us, that certain lands were held on the condition of hunting and destroying the wolves that infested the country. In the reign of Athelstan, wolves abounded so much in Yorkshire, that a place of retreat was built at Flixton, near Scarborough, for the protection of passengers against their attacks.

The ravages of these animals being always the most terrible in winter, when the cold is the most severe, the snow in the greatest quantity on the ground, and food the most difficult to procure, our Saxon ancestors distinguished the month of January by the appellation of wolf-month. An outlaw was also among them denominated wolf-shed, or one that was out of the protection of human society, and liable to be destroyed by the wolves.

Wolves infested Ireland many centuries after their extinction in England, but now they are extirpated in that island; and their numbers are very much diminished in most of the countries of Europe—a natural consequence of the increase of population, and the extension of agriculture.

The wolf is, of all animals, one of the most difficult to conquer in the chase; and in the forests of Germany, and other countries, where they are yet numerous, the following are the methods of hunting them:

In some sequestered part, they hang a piece of carrion on the

branch of a tree, having previously laid a train, by leaving at proper intervals small pieces of putrid flesh, which the wolves, having an exquisite scent, can smell at a great distance. The hunters then wait till it be dark, and with great circumspection approach the place, where they often find two or three wolves assembled, leaping up, and endeavouring to catch the bait; and while the animals are thus busily employed, they despatch them with their fire-arms.

Another method is to take them in strong nets, into which they are driven by the hunters, who surround a large tract of land, and with drums, horns, and other instruments, accompanied with loud shouts from a large company that is generally assembled on the occasion, drive them into the entrance of the nets, where they are entangled, and easily despatched. Sometimes they are taken in pitfalls, being allured by a bait.

It is remarkable, that as soon as the wolf finds himself ensnared, and sees no possibility of escape, his courage entirely forsakes him, and he is for some time so stupified with fear, that he may be either killed, or taken alive, without difficulty; and at that moment, one may muzzle him and lead him along like a dog; his consternation seeming to extinguish his ferocity and resentment.

Wolves are found, with some variety, in most countries of the old and the new continent. They are very prolific, bringing forth from five to nine young at a litter. The cubs, like those of the canine race, are brought forth with their eyes closed. The dam suckles them for some weeks, and it is said that she teaches them to eat flesh, by chewing it for them herself. Buffon says, that the wolf goes above a hundred days with young, while some other naturalists limit its time of gestation to the same period with that of the bitch, which is about sixty-three days; and from the accounts of the celebrated Dr. Hunter, there appears to be no room to doubt that the wolf and the dog will breed together, and produce an intermediate species capable of subsequent propagation.

We have already mentioned that these two animals, although extremely opposite in disposition and habits, resemble each other in form; it is also proper to observe, that in size there is not much difference, the wolf being somewhat taller than the largest greyhound; but he is so far superior in strength, as to be able to carry away a sheep in his mouth. His breath is very offensive, his bite difficult to cure, and his aspect ferocious.

Having given a display of the habits and disposition of the most destructive of all animals of prey, our attention will now be called to those of a creature which has always been as famous for his artifices, as the wolf has been for his cruelty.

THE FOX

Is an animal well known in most countries, and common in every part of Great Britain. All the keepers of poultry are well acquainted with his depredations, of which at one time or another he gives them a specimen; for he is not less artful in attacking the hen-roost, than the wolf is determined in assaulting the sheep-fold.

Hunting the fox is a healthful exercise, and constitutes one of the favourite diversions of the gentlemen of Great Britain. There is perhaps no part of the world where it is pursued with equal ardour and intrepidity. Both their dogs and horses are superior to those of every other country for this kind of chase, and yet they have sometimes, especially the latter, fallen victims to the ardour and length of the pursuit, which has in some instances continued from forty to fifty miles without intermission, and sometimes at full speed. One of the most celebrated chases recorded in the annals of fox-hunting, is that of the noted old fox Cæsar, started from Ayrceholine, in the county of Durham, by Mr. C. Turner's hounds. The length of this chase was above fifty miles; and Mr. Bewick says, that Mr. Turner tired three horses; and that no more than three dogs continued the pursuit, when he thought proper to call them off in the evening.

The moment that a fox finds himself pursued, he flies toward some of his holes; but these being always stopped up before the chase begins, he has no other resource than his speed and cunning. He does not double like the hare, but continues his course straight forward, with great vigour and perseverance. A constant chase has sometimes been thus kept up for seven or eight hours together, or even for a longer time.

The scent which the fox leaves behind him being exceeding strong, he appears sensible of that circumstance, and uses every artifice to bewilder the dogs, and throw them out of their track. He generally takes advantage of the wind, and often crosses rivers, swims down small streams, or runs along the top of a wall, or an artificial hedge, in order to interrupt the continuity of the scent, and puzzle the dogs; and his artful contrivances often succeed so well, as to ensure its safety. His urine is so offensive to the dogs, that it sometimes proves the means of facilitating his escape. If he find himself, in spite of all his shifts, at last overtaken, he defends himself with obstinacy until he is torn in pieces.

The fox generally fixes his residence at the edge of a wood not far removed from some village or hamlet, where he can listen with rapture to the crowing of a cock, the cackling of poultry,

and the gabbling of geese ; all this is delightful music in his ears. He soon contrives an opportunity to pay them a visit, and begins by levelling all without distinction. He then carries off a part of the spoil, hides it at some convenient distance, and returns for another load. Taking off another fowl in the same manner, he hides that also, but seldom in the same place ; and this method he pursues until the approach of day, or the noise of the family, warns him to retire. He puts in practice the same arts when he finds birds entangled in springs laid for them by the fowler, with whom he takes care to be beforehand. He is equally active in seizing young hares and rabbits, and in discovering the nests of the quail, the partridge, and the pheasant. When better food is deficient, he devours rats, mice, and almost every kind of vermin ; and even the hedge-hog, notwithstanding its prickles, is not secure against his attacks. No creature, but such as are too strong for him, can escape this universal glutton. His depredations are not limited to the search of animal food ; for he attacks the wasp and the bee, for the sake of their honey ; and, although the whole swarm sometimes flies out and fastens on him, he soon gets rid of the assailants by rolling himself on the ground. He then returns to the charge, and at last carries his point. Foxes are also extremely fond of grapes, and do much damage in vineyards.

A remarkable instance of the maternal affection of one of these animals, is related by Dr. Goldsmith :—A she-fox that had but one cub, was unkennelled by a pack of hounds, and very hotly pursued. The poor animal, braving every danger rather than expose her cub to the fury of the dogs, took it in her mouth, and ran with it, in that manner, for several miles. At length, in passing through a farm-yard, she was assaulted by a mastiff, and compelled to drop her little charge, which was immediately taken up by the farmer, while its affectionate dam eluded the pursuit, and got off in safety.

Of all wild animals, the fox is one of those which appear the most strongly influenced by difference of climate ; and there are found almost as many varieties in this species, as in that of any domestic animal. Those of England are commonly of a dusky red colour : the fore-part of the legs black, and the tail very long and bushy, and tipped at the end with white.

The black fox is valuable for his fur, which in Russia is esteemed superior to that of the finest sable. A single skin is sold for the enormous price of four hundred rubles, or between seventy and eighty pounds sterling.

The cross fox, which derives its name from a black mark which passes across the shoulders, and another along the back to

the tail, is a native of the cold parts of both the old and the new continent: its fur is very valuable, being extremely thick and soft. Great numbers of these skins are imported from Canada.

The corsac fox is common in the deserts of Tartary beyond the Yaick river. In summer its colour is a pale yellow, except on the throat, which is white. In winter it is grey, and the end of its tail black. It is smaller than the common fox, and its hair is soft and downy.

It lives in holes in the ground, and is hunted by the Tartars with falcons and greyhounds. Forty or fifty thousand of these foxes are taken annually, and their skins sold to the Russians, at the rate of forty copecs, or about twenty pence each. Great numbers of them are sent into Turkey. The natives use their skins instead of money.

Thus we have in this, as well as in some other animals, an exhibition of its various uses, and a display of the multifarious wisdom of the Creator, who has not ordained it solely as a depredator, nor confined its utility to the amusement of the human species, but also rendered it highly serviceable to man as an article of commerce, and conducive to the intercourse carried on between nations.



CHAPTER XXII.

THE WEASEL KIND.

..... "Beneath the shining waste
The furry nations harbour; tipt with jet,
Fair ermines, spotless as the snows they press;
Sables of glossy black; and dark embrown'd,
Or beauteous freak'd with many a mingled hue,
Thousands besides, the costly pride of courts."—THOMSON.

The reflections on the wise and beneficent dispensations of Providence, in accommodating the animal creation to the use of the human species, with which the subject naturally led us to conclude the last chapter, induce us to continue the display of the Divine wisdom and goodness, in giving a concise description of a species of small, but exceedingly valuable animals, which are in some countries of extraordinary importance, when considered in a commercial point of view. These are principally the fine weasel, the martin, the sable, and the ermine, which are all included in the weasel kind, which we shall next describe. In the mean time it will not be unpleasant to contemplate in one view, those

particular species which are so distinguished by the richness of their furs; and while they contribute a valuable article of commerce, furnish mankind with an opportunity of observing the wisely adapted beneficence of the Creator, in giving to these animals a covering, which, after having protected them from the rigours of a northern climate, serves as an article of utility, as well as of ornament, to man.

THE PINE WEASEL

Is found in Great Britain, but the species is not very numerous. It inhabits large forests, especially where the pine-tree abounds, on the tops of which it chiefly feeds. It is found in the greatest numbers in the northern parts of the old and the new continent: North America especially abounds with these animals, and from thence prodigious numbers of their skins are imported. The annual importation from Canada has been known to amount to thirty thousand skins, and about half that number from Hudson's Bay.

THE MARTIN

Is the most beautiful of the weasel kind, and more common in England than the last described animal. It lives in woods, and breeds in hollow trees, and produces five or six young at a birth.

The martin, when taken young, is easily tamed, and soon becomes exceeding tractable and playful, but is always ready to take advantage of any opportunity to make its escape, and flee to the woods, the residence to which Nature has given it the strongest propensity. The food of this animal is the same as that of all the weasel kind. It is extremely fond of honey, and sometimes feeds on grain.

M. de Buffon informs us, that a martin which he had tamed, sometimes slept two days successively, and at other times remained as long awake; and that in preparing for sleep, it always folded itself up in a round form, and covered its tail with its head. It made its escape two or three times, and returned of its own accord, but at last entirely absconded.

The martin is about a foot and a half in length; the body is covered with a thick fur, of a darkish brown colour; its head is small, and elegantly formed, and its eyes are lively; its tail is long, and bushy at the end; its ears broad. Its throat and breast are white; its belly a pale brown; its feet are broad, and its claws large and sharp, being well adapted for climbing trees. It is very active, and its motions are quick and lively. The fur has an agreeable musky smell, and is held in high estimation.

The difference between the martin and the pine weasel, consists chiefly in the colour, the breast of the latter being yellow,

and the body of a much darker brown than that of the former. The fur of the pine weasel is also superior in fineness, beauty, and value.

THE ERMINE, OR STOAT.

This animal being brown in the summer, is called the stoat. In the winter it becomes perfectly white, except the end of the tail, which is black, and invariably retains that colour. In this season it acquires the name of the ermine, and its fur is very valuable. It abounds in Norway, Lapland, Russia, and Siberia, and is also very common in Kamtschatka. In that country and Siberia, it is generally taken in traps, baited with flesh. The skins of the ermine are sold, in those countries, from two to three pounds sterling per hundred.

The natural history of this animal is nearly the same as that of the weasel. Its food is the same, and it also possesses an equal degree of agility. The ermine begins to change colour in November, and in March it resumes its summer vesture.

THE SABLE

Is, of all the animals of the weasel kind, the most highly esteemed, and its fur is the most admired; a single skin, although not more than four inches broad, being sometimes sold for fifteen pounds, a circumstance which would be incredible, were it not attested by writers, who possessed every means of information on the subject. The fur of the sable possesses this peculiarity, that whatever way it is stroked it lies equally smooth, whereas all others, when stroked contrary to the grain, give a sensation of roughness: its colour is a blackish brown, and the darkest are the most admired.

The sable resembles the martin in form, and nearly in size. It seems to be particularly fond of the shade, and inhabits the most impervious woods, where it lives in holes in the earth by the banks of rivers, or under the roots of trees: it possesses great agility, and bounds with velocity from tree to tree. From the singular closeness of its fur, which is extremely well calculated for resisting the water; and from being frequently found in small islands, it is supposed by many naturalists to be amphibious.

This small, but valuable quadruped, is a native of Siberia, Kamtschatka, and the islands which lie between that country and Japan; but scarcely any are found in European Russia, and still fewer in Lapland. Siberia, however, is the country where it most abounds, and which furnishes the greatest part of those valuable furs which constitute so lucrative a branch of Russian commerce. It is therefore in the immense forests of those desolate regions, that the business of sable-hunting is chiefly carried

on. This is the employment of soldiers sent thither from Russia for that purpose, as well as of criminals sent into exile. Both are obliged to furnish annually a certain quantity of furs, and for their encouragement they are allowed to share among them all the skins they can procure above the specified number, which, in a fortunate hunting season, amount to a very considerable value.

The hunters generally form themselves into small troops, each being directed by a leader of their own choosing. They shoot with a single ball, in order to injure the skin as little as possible; and frequently take them in traps, or kill them with blunt arrows.

The sable-hunters frequently endure the utmost extremity of cold, hunger, and fatigue. They penetrate into the inmost recesses of those immense woods and wildernesses, with which the extensive and desolate regions of Siberia abound, without any other means of tracing back their way, than by marking the trees as they advance. Should they neglect this precaution, or through any inattention deviate from their track, they must inevitably be lost. Sometimes they trace the sables on the new-fallen snow, place their nets at the entrance of their holes, and wait two or three days for their coming out, during which time they often suffer extremely from the inclemency of the weather, or the too early consumption of their provisions. In short, the hunting of sables is a serious and perilous employment, carried on in a rigorous climate, at an inclement season, and in the most desolate regions of the earth, amidst an aggregate of hardships, of which we can scarcely form any idea.

The season of hunting begins in November, and ends in February; during that period, the furs are in their highest perfection. At other times of the year, they are full of short hair, and of an inferior value. The best furs are such as have only long hair, black, and of a glossy brightness. The Russians and the Chinese have a method of dyeing them, but the deception is easily discovered, as the dyed furs have neither the smoothness nor the brightness of the natural hair.

We have already observed the cross fox, and the corsac fox, the skins of which constitute an important article of trade, and especially the black fox, the skin of which is esteemed the most valuable of all the furs in use. There are also other animals in the northern regions which contribute to the supply of the fur trade, among which may be reckoned the fisher, a native of North America, which very much resembles the sable, and abounds so much on that continent, that sixteen hundred skins have been imported from thence in one season. Several others might be mentioned, but we shall content ourselves with having brought forward to notice the principal ones; for in exploring a

subject so extensive as that of natural history, we must endeavour to generalize, and cannot descend to minute particulars. In this sketch, however, will be found enough to give us an exalted idea of the wonderful plan of the creation, and of the greatness of the Creator.

In the furs of these animals, of which we have just given a brief description, Russia carries on an important and lucrative trade with most of the countries of Europe and Asia, but most of all with Turkey and China. Constantinople and Pekin may indeed be considered as the two central points of this traffic, as the Turks and the Chinese are extremely fond of this article of dress; and in those two capitals of the Turkish and Chinese empires, a greater quantity of furs are used, than in any other two cities of the world.

Thus we see that the skins of these little quadrupeds constitute an important article in the commerce of a great empire, and one of the sources from which it derives a revenue that enables it to maintain numerous armies, and to stand high in the political scale of nations. This consideration will open to our minds an ample field for reflection on the harmonious plan of Nature and Providence.



CHAPTER XXIII.

THE WEASEL KIND.

"The artful, cruel, slender weasel, too,
Delights in blood."—SMITH.

"Thus oft th' *ichneumon* on the banks of Nile,
Invades the deadly Aspsi by a wile."—LUCAN.

As the valuable little quadrupeds, which, in the last chapter, were, from their commercial importance, considered as a distinct article of natural history, are generally classed with the weasel kind; we shall resume the subject, and endeavour to entertain with as brief a description as possible, of some other animals of the same race; and shall, in order to bring the subject into a closer view, preface it with an exhibition of a few general characteristics.

Animals of the weasel kind, are distinguished from others of the carnivorous race, by the length, slenderness, and flexibility of their bodies—qualities which enable them to wind into very small crevices, in order to follow their prey. Here, there-

fore, as in all the other parts of the creation, we discover a sagacious design in the admirable adaptation of the structure of these animals to their mode of living and obtaining their food.

Another distinction belonging to this race of animals, consists in an unctuous matter, continually exuding from glands placed near the anus, which in some, as the ferret, the weasel, and especially the founart and the pole-cat, emits an extremely offensive smell; while, in the civet-cat, the martin, the fine weasel, &c. it affords an agreeable perfume.

All animals of the weasel kind, are remarkable for rapine and cruelty; and although the shortness of their legs renders them slow in pursuit of their prey, they supply the deficiency of speed by assiduity and cunning. They always suck the blood of every animal they kill, before they eat the flesh.

These are the most striking peculiarities common to the weasel kind; the different species of which so nearly resemble each other, that the view of one will give a very just idea of the rest. The principal difference is in size. They all subsist nearly in the same manner, and on the same kind of food, and prey indiscriminately on almost every quadruped, volatile and reptile, that is weaker and less than themselves. They are particularly destructive to poultry and rabbits, as well as to rats and mice, and are keen devourers of eggs.

THE COMMON WEASEL,

Does not exceed seven or eight inches in length, from the nose to the tail, and the latter is not above three inches long. The height of this animal is not more than three inches. Notwithstanding its diminutive size, no animal of this class is more destructive in warrens, and among poultry. It is also a great destroyer of eggs, which it sucks with extreme avidity. It is very common in Great Britain, and is well known on account of these kinds of depredations. It will attack a hare, which is often terrified into such a state of imbecility at the sight of this diminutive assailant, as to give itself up to it without resistance. To rats and mice it is a more dreadful enemy even than the cat, for being more slender, it pursues them into their holes. It is, therefore, very useful to the farmer in out-houses and granaries, which in winter it commonly frequents, and effectually clears of all sorts of vermin; but it often counterbalances these benefits, by its destruction of eggs, and its depredations in the pigeon-houses, where it creeps into the holes and devours the young ones. It also catches by surprise sparrows, and all kinds of small birds, and always follows wherever rats or mice abound. When it enters the poultry-yard, it seldom attacks the cocks, or the old

hens, but always aims at the young ones, and never fails to suck, or at least to break all the eggs it can meet with. The evening is the time when it commences its depredations.

The weasel seems to have a strong predilection for every thing of a putrid nature. It conveys its food to its hiding-place, and seldom eats until it begins to putrefy. It is an untractable little animal, and when confined in a cage, appears in a continual state of agitation. M. de Buffon asserted the impossibility of taming the weasel, but his error has been corrected by experiment: for in some instances it has been rendered as familiar as a dog or a squirrel.

The method used in taming it, is to stroke it gently on the back; but it must be threatened, and even beat, when it attempts to bite.

The female weasel generally produces four or five young ones at a litter, having previously prepared a nest of leaves, moss, and herbage, for their reception. M. de Buffon asserts, that in his neighbourhood a weasel with three young ones was found in the body of a wolf that had been suspended from a tree by the hind-feet; and although the wolf was completely putrescent, the weasel had formed a nest in its thorax.

It has been observed of these animals, that when asleep, their muscles are so extremely flaccid, that they may be taken up by the head, and swung to and fro, like a pendulum, several times, before they awake.

The bite of this diminutive animal is generally fatal, as it always seizes its prey near the head, and fixes its teeth in a vital part. An eagle having seized a weasel, and carried it up into the air, the little captive so far disengaged itself as to bite its enemy in the throat, which soon brought him to the ground, and thus effected his escape.

THE FOU MART

Is an animal not uncommon in England: in shape it resembles the weasel, but far exceeds it in size, being not less than from fifteen to eighteen inches in length, exclusive of the tail, which is about five or six: it is generally of a deep chocolate colour. Its habits are perfectly similar to those of the weasel, and its mode of living in every respect precisely the same. It is exceedingly fierce and bold. When attacked by a dog, it fastens upon his nose with so keen a bite, as often to compel him to desist; and when unable to conquer, will at least defend itself to the last extremity.

In regard to this animal's mode of procuring subsistence, a curious circumstance was once observed:

During a severe storm, a foumart was traced in the snow from

the side of a rivulet to its hole, which was at some distance. As some marks were observed in the snow, for which it was not easy to account, curiosity suggested the expedient of examining the hole, when eleven fine eels were found, which had been the fruits of its nocturnal excursions to the rivulet; and the marks in the snow, which had appeared so singular, were then discovered to have been made by the writhings of the eels in the animal's mouth, while it was dragging them to its den. It would be a curious subject of investigation, to enquire by what means this crafty animal can obtain a booty, the seizure of which appears so difficult.

Although the smell of this quadruped is in the highest degree fetid and disagreeable, yet the skin is used as other furs, and retains no offensive odour. It is, however, far inferior in value to the fur of the sable, the ermine, and other natives of the northern regions. The skins sell from eighteen pence to half a crown a-piece.

THE ICHNEUMON

Is an animal which has long attracted the attention of naturalists, and given rise to a number of absurd and ridiculous stories. It has from time immemorial been domesticated in Egypt; where, for its services in destroying the eggs of the crocodile, as well as its young, it was, like several other beneficial animals, worshipped as an emanation of the Deity. From the estimation in which it was held in that country, it has obtained the appellation of the rat of Pharaoh.

The ichneumon is about the size of a cat, and in Egypt is domesticated like that animal, and kept for the same purposes of destroying rats and mice. In shape, it nearly resembles the fourmart, or pole-cat: its fur displays a mixture of tints, white, brown, fawn colour, and silver grey. The domestic is larger than the wild kind, and its colours are more variegated: its eyes are small and sparkling: its claws are long. When it goes to sleep, it rolls itself up like a ball, and sleeps very sound. It frequently sits up like a squirrel, catches any thing that is thrown to it, and will often lie as if dead, until its prey come within its reach.

This remarkable animal possesses all the strength and agility of the cat, with a greater propensity to carnage. It attacks the most deadly serpents, and preys on every noxious reptile; it darts with the velocity of an arrow on its object, and seizes it with inevitable certainty. To the crocodile it is a formidable enemy, as it destroys the eggs of that dreadful reptile, and often kills great numbers of the young immediately after their production.

M. de Obsonville tells us of an ichneumon which he had

reared, and which was tamer than a cat, and followed him wherever he went. One day he brought to it a small water-serpent, being desirous of knowing how far instinct would carry it against a creature with which it was entirely unacquainted. Its first emotion seemed to be a mixture of astonishment and anger. Its hair immediately stood erect: in an instant it slipped behind the reptile, and with extraordinary agility leaping upon its head, seized and crushed it with its teeth. This first essay awakened its natural appetite for blood. It became formidable to the poultry, which it took every opportunity to destroy: it sucked their blood, and ate only a part of their flesh.

These animals abound not only in Egypt, but in the southern countries of Asia: they are also found near the Cape of Good Hope. They frequent the banks of rivers, are amphibious, and will remain a considerable time under water.

In this class are also enumerated the fossant, the skunk, the zorilla, and several others; all of them discriminated from one another by some peculiarities, but their general characteristic seems to be the disagreeable stench they emit, which, in a greater or less degree, is common to all the animals of the weasel kind.

Another tribe of this race is distinguished by the agreeableness of their perfume. So prolific is Nature, and so various her operations, that imagination itself cannot keep pace with the infinite diversity of her productions. All this variety is ordained for some wise end, which, in a great measure, lies beyond the reach of our investigation. Human research has discovered and explained many of the wonders of Nature: future inquiries into her secrets will lead to new discoveries; but all the recesses of the immense abyss will never be explored: man will never be able to comprehend the whole plan of infinite wisdom.

THE GENET

Is one of those odoriferous animals which emit a perfume faintly resembling that of musk. It is somewhat longer than the martin, with a long and slender head, a sharp muzzle, and ears a little pointed. Its hair is soft, smooth, and shining, of a tawny red, spotted with black. Along the back it has a mane of long hair, which forms a black line from the head to the tail. The spots on the sides are round and distinct, those on the back nearly run together: its tail is long, and marked with seven or eight rings of black. On the whole, it is a beautiful, cleanly creature; and although active and persevering in pursuing its prey, is of a mild and gentle disposition. Its colours are agreeably variegated, and its fur is held in great estimation. The genus does not appear to be extensively diffused, being seldom seen any where except in Turkey and Spain. At Constantinople they

have genets in their houses, which are as tame as cats, and effectually expel rats, mice, and all other noxious vermin.

THE CIVET

Produces a perfume of much stronger quality than that of the genet, and affords a far greater quantity: in size it is also superior to that animal. This is indeed the largest of all the weasel kind. Its teeth are strong and sharp, but its claws somewhat weak. It is active and nimble, leaps like a cat, and lives in the same manner, and on the same kinds of food as the weasel: like that, and most other carnivorous animals, it hunts its prey chiefly in the dark. It is naturally wild, and somewhat ferocious, but when tamed becomes tolerably tractable.

The civet is originally a native of warm countries, but lives and thrives tolerably well in temperate, and even in cold climates, if it be well protected from the weather; and in Holland many are kept for the sake of their perfume, which is contained in a pouch near the tail, whence it is drawn two or three times a week.

The very idea of animal perfumes appears offensive to a delicate mind; but although this in particular is in the present age growing out of fashion, it was formerly very much esteemed, and sold as high as fifty shillings per ounce. The quantity of perfume which the civet yields, depends principally on the health of the animal, and the nutritious quality of its food. The ancients were well acquainted with its perfume, and ascribed to it certain fabulous powers; it is so strong, that it is impossible to bear any considerable quantity in a room; and no person could support the scent of the animal, in a place not admitting a free circulation of air. This perfume, however, is generally esteemed more agreeable than musk; and industry, taking advantage of the caprice of taste, has contrived to make it a lucrative article of commerce.

THE ZIBET

Is, by some, considered as an animal distinct from the civet, while others suppose it to be only a variety of the same kind. They differ indeed in several distinguishing characteristics; but they seem to agree in the most essential qualities; and their general relations are so striking, that all the perceptible difference between them may, with the strongest probability, be supposed to proceed from climate, food, or other accidental circumstances.

THE GLUTTON

Is frequently found in the northern parts of Europe and America, and derives its name from its voracious appetite. Lin-

næus classes it in the weasel kind, from the length of its body, the shortness of its legs, and some other characteristics; but its body, which is about three feet long, is proportionably much thicker than that of the generality of this race of animals.

From the shortness of its legs, this creature is unable to pursue its prey; but its claws are peculiarly calculated for climbing trees, where it frequently watches whole days together, in expectation of the approach of some animal which it may seize on. The elk and the rein-deer are its favourite food, and when they pass under the tree, it darts down upon them, strikes its claws between their shoulders, and there remains fixed in spite of all the efforts of the unfortunate victim to extricate itself from the devourer. The glutton adheres immoveably to its station, and eats away the flesh until it reaches the large blood-vessels. Its voracity is insatiable; it stuffs itself until it can no longer move, and then remains in a state of torpidity by the side of the animal it has killed, and thus continues sometimes two or three days, until its stomach be unburdened, and then it again begins to gorge upon the remains of the carcass, which it never leaves until it has devoured the last morsel. The fur of this animal is held in the highest estimation, and considered as inferior only to the black fox and the sable. It is extremely soft and glossy, of a reddish brown colour, except on the back, which is of a bright shining black, and which reflects the light like damask silk. The skins are sold in Siberia at five or six shillings a-piece; in Yakutsk, at twelve; and still higher in Kamtschatka. There the women adorn their hair with the white paws of this animal, which they esteem a great ornament. The skins which are produced in the north of Europe, are beyond comparison finer, blacker, and more glossy, than those of America.

Thus we perceive that this singular animal, so remarkable for its insatiable voraciousness, furnishes one of the most valuable articles of the fur trade. Nature, in all her works, produces something either immediately or ultimately beneficial to man, and proclaims the beneficence, as well as the wisdom, of her Omnipotent Author.

Several other animals of the weasel kind have been observed by travellers, and described by naturalists; but as we would not embarrass the memory by a tedious detail of minutiae, we shall conclude this chapter by giving only a brief description of the raccoon and the badger.

THE RACCOON

Is common in many warm countries, particularly in several parts of the new continent, It also inhabits the mountains of Jamaica, whence numbers descend into the plantations, and make

great havoc among the sugar-canes, of which they are remarkably fond. They frequently do incredible mischief in one night's excursion. The planters devise various methods of destroying them, but they are so numerous as to render their extirpation impossible, and it is exceedingly difficult to prevent their depredations.

The raccoon possesses great agility: by the help of its claws, which are extremely sharp, it climbs trees with great ease. When tamed, it is good-natured and sportive, but busy and inquisitive like a monkey. It examines every thing with its paws, and makes use of them as hands to lay hold of every thing that is given it, as well as to carry victuals to its mouth. It sits up to eat, and is extremely fond of sweet things; but still more of strong liquors, with which, when it has an opportunity, it will get completely intoxicated. It has all the cunning of the fox, is very destructive to poultry, and will eat all sorts of grain, fruits, and roots. It delights in hunting spiders, devours all kinds of insects, and, when left to range in a garden, will eat grasshoppers, snails, and worms. It opens oysters with amazing dexterity, and has a peculiar method of dipping in water every thing it intends to eat. Indeed, it will seldom taste bread unless it be well soaked. It is familiar and caressing; and leaps upon those it is fond of, moving with great agility.

A French gentleman had, at one time, a raccoon, of which the following particulars are related: When confined by a chain, he always appeared gentle, but had little inclination to fondness: when liberated, however, he used to express his gratitude by a variety of little caresses. It sometimes happened that his chain broke, in which case liberty rendered him insolent, as he would roam about for three or four days together upon the tops of the neighbouring houses, descend, during the night, into the hen-roosts, and eat the heads of all the poultry, having previously strangled them. It was with great difficulty that he could again be caught, and reconciled to bondage.

He possessed a strong recollection of ill-treatment, and he could never be brought to forgive it: a servant, one day, gave him several lashes with a whip; but ever afterwards endeavoured in vain to effect a reconciliation. At the approach of this servant, the animal always exhibited symptoms of rage, and endeavoured to spring at his enemy, uttering the most doleful cries, and obstinately rejecting even the most favourite food, till the object of his aversion quitted the room. He appeared to dislike noise; as he was always irritated by the crying of children, and frequently inflicted a severe chastisement on a favourite little bitch, when she barked too loud.

The head of the raccoon resembles that of a fox; its body is

thick and short, covered with long hair, black at the ends, but grey underneath. Its tail is long and bushy, and marked with alternate rings of black and white: its skin is the most valuable part of this animal, and is reckoned next to the beaver for the manufacture of hats.

THE BADGER

Is a very inoffensive animal; and although Nature has furnished it with offensive weapons of the most formidable kind, it never uses them but for the purposes of defence. When attacked, however, it employs all its powers of resistance, and defends itself with the most desperate obstinacy.

The badger is about two feet and a half long, from the head to the insertion of the tail: it is of a dirty grey colour; the legs, which are black, are very thick, strong, and short: it has five toes on each foot; those on the fore-feet are armed with sharp claws, well adapted for digging its subterraneous habitations. It is a very cleanly creature, and never defiles its hole with ordure. Its different parts are converted to various uses. Its flesh, although not delicious, is not an unwholesome, nor even a very unpalatable food; and the hind-quarters, especially when made into hams, and well cured, are by some esteemed not inferior to bacon. Its skin, however, is the most useful part, as it is made into coarse furs, collars for dogs, horse trappings, and divers other articles. Its hair is also used for making painters' brushes, so that the different parts of this little animal are convertible to a variety of purposes, and serve to show the comprehensive plan and beneficial designs of the Author of Nature.



CHAPTER XXIV.

THE BEAR.

"There through the piny forest half absorpt,
Rough tenant of the shades, the shapeless bear,
With dangling ice all horrid, stalks forlorn:
Slow pac'd, and sourer as the storms increase,
He makes his bed beneath th' inclement drift;
And with stern patience, scorning weak complaint,
Hardens his heart against assailing want."—THOMSON.

WE shall, in this chapter, describe a surly and formidable race of animals, which, however arranged by systematic writers, evidently constitute a distinct species, being distinguished both by

their exterior conformation, and many of their propensities and habits, from all other quadrupeds of the carnivorous class.

THE BEAR

Is an animal generally known, and yet various differences and contradictions exist among the writers of natural history concerning this subject, which can have originated only from the circumstance of not rightly distinguishing the different species.

The three principal varieties of the bear kind, are the brown, the black, and the white, or great polar bear: the first is an inhabitant of almost every climate; the black bear is chiefly found in the extensive forests with which the northern regions of Europe and America abound.

The bear is a solitary, savage, and ferocious animal; he chooses his residence in the most unfrequented deserts, and makes his den in the most dangerous and inaccessible precipices of mountains, where silence and solitude reign. For this purpose, he commonly searches out some natural cavern, or some hollow tree of an enormous size, which it is not very difficult to find in the immense forests of the hyperborean regions. About the end of autumn, at which time the bear is exceedingly fat, he retires to this asylum, and remains, during some weeks, in a state of total inactivity, and abstinence from food. This animal is not, however, like some others, totally deprived of sensation during that interval, but seems to subsist on the former exuberance of his flesh, without feeling the calls of hunger, until the superabundant fat which he had acquired in the summer season, begins to be considerably wasted.

During the time of this apathy, to which the male bear resigns himself, the female brings forth, and suckles her young. For this purpose she chooses her retreat in the most sequestered places, and apart from the male, lest he should devour them. She makes a warm bed for her cubs, and nurses them with unremitting assiduity for the space of about four months; during which time she scarcely allows herself any support. The bear produces only two, or at the most three at a time. The cubs are at first not above eight inches long, and remain blind during the first month. The time of this animal's gestation is six months, and the beginning of January is their time of parturition. Although the male bear, whenever it finds an opportunity, destroys the little ones, the females are fond of them to a ferocious distraction; and as soon as they have brought forth, their fierceness is more violent and dangerous than that of the males.

In the spring, the old bears come out from their retreats, lean, and almost famished with confinement and abstinence. They then ransack every place for food, climb trees, and devour the



fruit. They ascend the highest trees, with surprising agility: with one paw they hold themselves fast to the branches, and with the other they gather the fruit. They are remarkably fond of honey, for which they seek with great avidity and cunning, and will encounter any difficulties to obtain it.

The bear is easily irritated, and his resentment is always furious, and often capricious. When tamed, he appears mild and obedient, but never ought to be too far trusted. He may be taught to walk upright, to dance, and play many curious pranks; and the multitude are highly entertained with the clumsy motions of this rugged and unwieldy creature. The young bears show a considerable degree of docility in acquiring these accomplishments; the old ones, however, will not submit to this kind of education, but manifest the most ferocious resentment against any attempt to subject them to discipline.

The bears of America are of a small size, and quite black; and although ferocious, are not carnivorous. Even when pressed with hunger, they will not eat animal food, but live on vegetables, and are particularly fond of potatoes, honey, and milk. They lodge in the hollow trunks of large trees, which they climb and descend with great agility. The hunters generally take them by setting fire to their habitation. The old ones then come out first, and are slain, and the cubs follow, and are taken alive. The flesh of the young bear is reckoned a great delicacy; and the paws of the old ones are esteemed an excellent dish. The fat is very sweet, and of great efficacy in curing sprains, and various kinds of swellings.

Bears are found in most countries whence an increased population has not expelled them: but they seem to prefer a cold, or at least a temperate climate. The Romans exhibited numbers of them in their public spectacles. They were once common in England, and were included in the ancient laws respecting beasts of chase. Long after their extirpation, they were imported for the inhuman purpose of baiting them, and it is much to be regretted, that this cruel diversion is still used in many parts of that enlightened kingdom. It is much to be wished, that every exhibition of this kind were prohibited under severe penalties, that so Englishmen might not be reproached with delighting in amusements disgraceful to human nature.

Every trait of humane and generous feeling displayed by illustrious characters, reflects honour not only on themselves, but also on the nation which their virtues serve to adorn.

A very fine bear, having some years ago been presented to the Prince of Wales, was kept in the Tower. By the carelessness of the servant, the door of his den had been left open, and the keeper's wife happening to go across the room, the animal flew

out, seized the woman, threw her down, and fastened on her neck, which he bit, and without offering any further violence, lay upon her, sucking her blood. Resistance being in vain, she must have inevitably perished, had not her husband fortunately discovered her situation. By a sudden and well-aimed blow, he obliged the bear to quit his hold and retire to his den, which he did with great reluctance, and not without making a second attempt to reach the woman, who was almost dead with fear and the loss of blood. It is remarkable, that whenever the animal happened to see her afterwards, it growled, and made violent efforts to get to her. His royal highness, upon hearing of the circumstance, immediately ordered the bear to be killed. This fact is related in Mr. Bewick's celebrated History of Quadrupeds, and reflects greater honour on his royal highness' character than could ever be derived from the sanguinary successes of a Genghis Khan, or a Tamerlane.

If animals of the ferocious kind be cruel and sanguinary, man, however, to the disgrace of his nature, sometimes strives to surpass them in ferocity and cruelty. Humanity must shudder at the excessive barbarities too often exercised on the bear, in teaching it to walk upright, and to regulate its motions to the sound of certain instruments. Its eyes are sometimes put out, and an iron ring put through the cartilage of its nose, to lead it by; with a variety of other kinds of ill treatment. Some are taught to dance, by having their feet placed on hot iron plates, and playing to them while in that uneasy situation. To every feeling mind it is shocking to reflect that such cruelties should be exercised on the brute creation, for the sake of obtaining paltry contributions from an unthinking crowd, which is gratified by such exhibitions. Was it for this purpose that the benevolent Author of Nature has created these animals, and endowed them with life and sensation? What account shall man render to the Sovereign of the universe, for this wanton and cruel abuse of those creatures which his hands have made?

THE POLAR, OR GREAT WHITE BEAR,

Is a species very different from the common bear, and far exceeds it in size, some of them being above thirteen feet long, with limbs of a prodigious size and strength. Its hair is of a yellowish white, long and rough: its ears are short and round, and its teeth large.

The ferocity and undaunted courage of this animal have been remarked by all who have visited those frozen regions, where it makes its abode.

The crew of a boat belonging to a ship in the whale fishery, shot at one of these creatures at some distance, and wounded it.

The bear, far from being intimidated, set up the most dreadful yells, and ran along the ice directly for the boat. Before it could reach it, a second shot was fired, by which it was again wounded. This served only to increase its fury. It presently swam to the boat, and, attempting to board, reached its fore-paw upon the gunnel; but one of the crew, having a hatchet, cut it off. The animal, however, still continued to swim after them until they arrived at the ship, although several shots were fired, which also took effect. But on reaching the ship, it immediately ascended the deck. The crew having then fled into the shrouds, it was pursuing them thither, when a shot at last laid it dead. Such an instance of ferocious resolution is not, perhaps, to be found in any other of the quadruped race. It will not, indeed, hesitate to attack a party of armed men, and has scarcely ever been known to retreat at the sight of any danger.

The attachment of this animal to its young, is not less remarkable than its determined courage. The white bear will rather die than desert its offspring. When wounded and dying, it embraces its cubs to the very last moment of its existence, and when by any means deprived of them, bemoans the loss with the most piteous cries.

The sagacity evinced by these quadrupeds in searching for prey, is particularly worthy of attention. The Hon. Robert Boyle informs us, upon the authority of a friend, that the smell of the white bears about Greenland, notwithstanding the severity of the climate, is extremely acute; and that sometimes when the fishermen have left the carcass of a whale floating on the sea, three or four leagues from the shore, whence it could not be seen, these animals will stand at the brink of the water, and, raising themselves on their hind-legs, loudly snuff in the air, and drive it, as it were, against their snouts with their fore-paws, and when satisfied what point the odour comes from, they will plunge into the sea, and swim directly towards the carcass.

The flesh of this animal is white, and tastes like mutton: its fat is melted into train-oil; and from the feet an oil is extracted, which is of considerable use in medicine. Thus we see that Providence has ordained that the white bear, although placed in the icy solitudes of the polar regions, should yield its tribute of utility to human industry and enterprise.

They feed on fish, seals, and the carcasses of whales. They sometimes attack the moose, with which they have terrible conflicts; but the large teeth of that animal give it so great an advantage that the bear is often worsted. The white bear inhabits only the coldest regions, and is seldom found on this side of the polar circle, unless when driven thither on the fields of ice by

storms. It abounds chiefly on the shores of Hudson's Bay, Greenland, Spitsbergen, and Nova Zembla.

We shall now proceed to give a concise description of some of the most remarkable animals of the scaly and prickly kind:

THE PORCUPINE,

Formidable in appearance, is, in disposition, perfectly inoffensive; it lives on fruits, roots, and different kinds of vegetables: sleeps in the day, and feeds in the night.

Some naturalists have asserted, that the porcupine discharges its quills against its assailants; but this opinion is now universally known to be erroneous. Although this animal does not possess, in regard to offensive war, the extraordinary advantages which error has supposed, it is sufficiently armed to resist the attacks of animals much stronger than itself. When irritated or alarmed, it raises its quills, which form an effectual safeguard to its body, so that few animals are capable of injuring it. The largest of its quills are from ten to fifteen inches in length, thickish in the middle, and extremely sharp at the point. Between the quills there grows a kind of thin, black, and bristly hair. The tail is covered with short quills, white and transparent.

The porcupine is not a native of Europe, although found in a wild state in Spain and Italy. It is common in all parts of Africa, as well as in India, Persia, and Palestine. The flesh of this animal is sometimes exposed in the markets at Rome. The Indians also very commonly eat it; but they hunt it chiefly for its quills, with which they make a curious kind of embroidery.

A porcupine was for some time kept by the late Sir Ashton Lever, which he frequently turned out on the grass behind his house, to play with a tame hunting leopard and a Newfoundland dog. These animals always began to pursue the porcupine, as soon as they were set at liberty; but when the object of their pursuit found it impossible to escape by flight, he cunningly thrust his head into some corner, and erected his quills, with which his enemies pricked their noses, till at length they quarrelled between themselves, and thus afforded him an opportunity of escaping.

THE HEDGEHOG

Appears to be the porcupine in miniature. It is so generally known, that we need not describe it. We shall only remark, that it is one of the most inoffensive animals; and that although Nature has provided it with a spinous armour, sufficient to protect it from the attacks of the weasel, the foomart, and other beasts of prey of the smaller kind, it cannot secure it from the

cruelty of man, or of dogs trained up to the sport of tearing it in pieces, merely to gratify the barbarous pleasure of seeing a harmless creature endure with astonishing patience the most wanton and unprovoked outrages. The cruelties inflicted on this inoffensive animal for savage pastime, are often such as must make sensibility shudder. Shocking, indeed, must it be to consider that man, weak and mortal himself, and liable to a thousand misfortunes, should find a barbarous pleasure in torturing, with savage cruelty, beings, which, like himself, are endowed with life and sensation, and, like himself, are exposed to a variety of physical evils. Although inferior to him in the scale of existence, the consideration of that inferiority ought to excite his compassion, and not stimulate him to cruelty; above all, it ought to excite his gratitude to the Bountiful Giver of all good, for that pre-eminence over the brute creation with which he sees himself endowed.

During the winter, these animals wrap themselves up in a nest of moss, leaves, and dried grass; and it is sometimes so completely covered with herbage, that it resembles a ball of dried leaves: in this situation it remains perfectly torpid, till revived by the cheering influence of spring. The female produces four or five young ones at a time, which are soon covered with spines, though shorter and weaker than those of the parent animal. It is said that these creatures may be in some degree domesticated; and an instance once occurred in Northumberland, of a hedgehog performing the duty of a turnspit at a public inn.

THE ARMADILLO

Is a curious animal, and, like the tortoise, is covered with a strong shell, or rather a mass of scaly incrustations. To give a minute description of the shells of this quadruped, would be extremely difficult, or rather impossible, as they are all composed of a number of parts differing greatly from each other in the arrangement of the figures by which they are distinguished. In general, there are two large pieces of shell which cover the shoulders and the rump, between which lie the bands, which are more or less numerous in the different species. These bands, which somewhat resemble those in the tail of a lobster, being flexible, give way to the motions of the animal.

The Indians hunt the armadillo with dogs trained for that purpose. The moment it perceives itself attacked, it flies to its hole, or makes a new one, which it does with great expedition, by means of the strong claws with which its fore-feet are armed. If no other chance of escape be left, it draws its head under its shell like a snail, tucks its feet close to its belly, unites the extremities of the head and tail, and thus closely rolled up, pre-

sents to its antagonists a callous ball, on which no impression can be made. In this posture it sometimes effects its escape, by rolling itself over the edge of an abrupt precipice, in which case it generally falls to the bottom unhurt. The most successful method of catching armadillos, is by snares laid for them in the places which they frequent. They are hunted chiefly for the exquisite delicacy of their flesh. They always burrow deep in the ground, and seldom stir out except in the night, while in search of their food, which consists of roots, fruits, and other vegetables. They are harmless, inoffensive animals, and often grow very fat.

Of this kind of animal there are several varieties: the six-banded armadillo is about the size of a young pig; it is generally found in Brazil and Guiana: the kabassou, or twelve-banded armadillo, is the largest of all the race, being almost three feet in length: this kind is seldom used for the table. The weasel-headed armadillo receives its appellation from the form of its head: it has eighteen bands, and is about fifteen inches long.

All the different varieties of the armadillo are natives of South America, and no species of it has ever been discovered in any part of the old world, although it seems to bear, without any apparent inconvenience, the severity of our climate.

Some pretend that a close friendship subsists between the armadillo and the rattlesnake. It is indeed a fact not to be called in question, that both have been found in the same subterraneous apartment; but whether this circumstance proceeds from any friendly connexion between these two very different creatures, or whether it be merely the effect of accident, is not easy to determine, although the latter appears the most probable. It seems, however, to be a fault much too common among naturalists, to draw general conclusions from partial observations, accidental circumstances, or ill-authenticated accounts

THE PANGOLIN, OR GREAT MANIS,

Is a native of Formosa, and the other oriental islands; and is also found in Guiana, where it feeds on ants. It is slow in its motions: it generally grows to the length of four feet, exclusive of the tail, which is nearly of the same length with the body. Like the armadillo, it is defended by a coat of mail, which protects it against the attacks of the most powerful and ferocious assailants. Even the tiger and the panther attack it in vain; for being closely covered with scales, which it can erect at pleasure, it opposes to the adversary a formidable rank of offensive weapons. The moment it perceives the approach of an enemy, it

rolls itself up like a hedgehog, and by that means secures itself against the assault of every predaceous animal.

The flesh of the pangolin is in great request for its delicacy; but it is difficult to procure, as this animal lives in the most sequestered retreats, in unfrequented woods and morasses.

THE PHATAGIN

Is an animal apparently of the same species, but of a diminutive size, being seldom above a foot in length. In other respects, it resembles, both in its conformation and habits, the last described animal. It is chiefly found in Guinea, and has sometimes been denominated the scaly lizard. This animal may be considered as the connecting link between the quadruped and the reptile race.

We shall now describe a creature, which is the most sluggish and inactive of all the quadruped race, and which seems to be the most miserable, if we could be supposed to judge of the measure of animal happiness.

THE SLOTH

Is a native of South America; but one species of it, called the unau, has been found in the island of Ceylon. The flesh of both is eaten by the natives of those countries. It is said to belong to the class of ruminating animals.

The sloth lives chiefly in trees, and having ascended one with infinite labour and difficulty, it remains there till it has entirely stripped it, leaving neither fruit, blossom, nor leaf, after which, it is said to devour even the bark. Being unable to descend, it throws itself on the ground, and continues motionless until hunger again compels it to renew its exertions.

Though slow, and apparently almost incapable of motion, the sloth is very strong, tenacious of life, and patient of abstinence. The strength of its legs and feet is so great, that having seized any thing, it is next to impossible to compel it to quit its hold. One of these animals having laid hold of a dog that was let loose upon it, held him fast at his feet till he perished with hunger.

The sloth is about the size of a fox; it is covered with a coarse ill-set hair: its nose is very blunt, its eyes black, its ears small, and its mouth extremely wide, extending almost from ear to ear; its legs are thick and clumsy. Its motions are so slow, that it cannot advance above three yards in an hour: they seem to be made with great efforts, and are always accompanied with the most piteous cries.

Buffon observes of this animal, that when kept in a house it never sleeps on the ground, but always climbs on some post or door, for that purpose. If a pole be held out to it when on the

ground, it will immediately cling to it; and when the pole is elevated, it will immediately climb to the top. The same naturalist remarks, that the female sloth produces only one young one at a birth, which she frequently carries on her back.

This appears to be almost the only animal to which Nature seems, according to our superficial observations and imperfect manner of judging, to have denied a conformation of body and power of action adapted to its wants; but let us not make too hasty a decision in estimating its happiness. A single tree affords it subsistence for a considerable time, and consequently it enjoys plenty without any long search: and as a creature of so imperfect a conformation could not possibly procure water, indulgent Nature has kindly taken care that it should feel no inconvenience from the want of that article, so necessary to most other animals. This circumstance alone shows, that the well-being of this creature has not been overlooked by the Creator in the immensity of his works. Its plaintive moans, which we consider as expressions of pain, may perhaps be a cry given for its preservation, as all beasts of prey fly from the sound. It may have enjoyments peculiar to itself. We cannot judge of the sensations of this, or any other animal; but we are certain that the God of Nature has never made any creature for misery.



CHAPTER XXV.

THE HARE AND RABBIT.

"'Tis instinct that directs the timid hare
To choose her soft abode. With step revers'd
She forms the doubling maze; then, ere the morn
Peeps through the clouds, leaps to her close recess."—THOMSON.

The hare and the rabbit, two gentle and timid animals, which, although troublesome to man in frequently destroying the fruits of his agricultural labours, are not without their utility in furnishing an excellent viand for the table, as well as a considerable article of commerce, will form the subject of the present chapter, which, though short, we hope will contain its share of entertainment and usefulness. Both these animals are destitute of every means of defence, and on every side surrounded with enemies; but the great Author and Preserver of all beings, has, in the wise and good plan of his universal providence, given to one such a variety of means of escape, and to the other so amazing a fecundity, that neither is extirpated.

THE HARE

Is an animal so generally known, that a minute description is unnecessary. It is proper, however, to remark, that being furnished with long ears, which are readily moved and directed with facility to every quarter, it is instantaneously warned of the approach of danger; and the largeness and prominency of its eyes, adapted to the perception of objects in every direction, equally contribute to its safety. Its swiftness, also, is such, that it soon leaves its pursuers behind; and its enemies can seize it only by surprise, or by wearying it out with long and persevering pursuit. The hind-legs of the hare being much longer than those before, and very strong and muscular, give it a singular facility of running up a hill; an advantage of which, from an instinctive knowledge of its powers, it seldom fails to avail itself.

Thus formed for escape, apprehensive of every danger, and attentive to every alarm, this inoffensive animal might be supposed to live in a state of tolerable security; but every rapacious beast and bird is its enemy; and man, more formidable than all, makes use of every artifice to obtain so delicious an article of food for his table.

Were we to enumerate the various stratagems which human ingenuity has invented for taking this timid creature, we might also enter into a long detail of its contrivances for evading pursuit. The hare frequently runs to a pool of water, and swims to a cluster of rushes growing in the middle, where it conceals itself from the view of the dogs, or crosses a stream in order to break their scent. It will sometimes run into a sheep-fold, and lie down among the sheep, or leap upon an old wall, and hide itself among the ivy, or weeds growing on the top; and Fouloux says, that he has seen a hare, which, after having run more than two hours before the dogs, pushed another hare from its seat, and took possession of it, thus concealing itself at the other's risk.

The hare derives a considerable degree of safety from its colour resembling that of stubble, or fallow ground: in some of the northern regions it turns white in winter, and is scarcely distinguishable from the snow, which demonstrates the attention of the Author of Nature to the preservation of his creatures.

Mr. Borlase, in his History of Cornwall, gives an account of a hare which was so completely tamed, as to lie quietly under a chair in a common sitting-room, feed from the hand, and, after occasionally regaling in the garden, return to the house, as its proper habitation: its evenings were always spent with a spaniel and a greyhound, which slept quietly on the same hearth, and

even permitted the little creature to rest upon their bodies, though both of these animals were remarkably fond of hare-hunting.

The hare is found in most parts of the world. Its flesh was forbidden to the Jews, but was esteemed a great delicacy among the Romans, as it is now at our tables. Among the ancient Britons this animal was held sacred: at this day it is reckoned unclean by the Mahometans. The fur of the hare is of great use in the manufacturing of hats; and many thousands of their skins are annually imported from Russia for this purpose.

The hare is very prolific. The female goes thirty days with young, and produces three or four at a litter, three or four times a year.

THE RABBIT

Is an animal so common, and so well known, that any description of its form would be superfluous; it may not, however, be amiss to observe, that although the tame kind assume a variety of colours, the wild are invariably brown.

Notwithstanding the general resemblance which exists between this animal and the hare, their habits and propensities are very different, as well as their fecundity, and several other distinguishing characteristics; and they also seem to have a natural aversion for each other.

The rabbit lives to the age of nine or ten years. It prefers a warm climate; and in Sweden, and other northern regions, it cannot be reared but in houses. It is common, however, in all the temperate countries of Europe. In Spain they had once become so numerous, and were found so destructive to vegetation, that the inhabitants were obliged to introduce ferrets from Africa, in order to diminish their numbers.

They abound in every part of Great Britain, especially in Cambridgeshire, Norfolk, Lincolnshire, and on the wolds of Yorkshire; but in many of these parts several warrens have been lately converted into sheep pastures, or tillage, and the number of rabbits is consequently diminishing.

The fecundity of the rabbit is astonishing, and exhibits a curious article in the history of animated nature. This little quadruped breeds seven times in a year, and generally produces seven or eight young at a time; whence may be calculated the wonderful, and almost incredible increase of which a single pair might in a few years be capable; but as their propagation is rapid, their enemies also are numerous. Foxes, fowmarts, and almost all animals of the weasel kind, make them their prey, without reckoning the immense numbers taken for the use of man. Indeed, if a considerable reduction did not by various

means take place, there is every reason to believe that their numbers would exceed the means of support, and totally consume the whole vegetable produce of the country. In this animal, therefore, as well as in many others, we discover a striking display of the wisdom of the Creator, in so exactly proportioning the measure of fecundity and destruction.

The rabbit is not among the indigenous animals of America ; but in many of the West India islands there are great numbers, which have originated from a stock carried thither from the old continent.

One striking dissimilarity between the habits of this quadruped, and those of the hare, to which, although inferior in size, it bears so visible a resemblance, is, that the former burrows in holes in the ground, while the latter depends on speed for its security. The flesh of the rabbit, as well as that of the hare, is esteemed unclean by the Jews and the Mahometans, but is considered as a delicacy among Christians ; and the fur of the one as well as of the other, constitutes a very considerable article in the manufacture of hats. The skins of the rabbits, indeed, constitute no small part of the profits of those who keep warrens. Thus we see how wonderfully the Creator has multiplied his blessings, and how much he has rendered this prolific little animal conducive to our convenience and comfort.



CHAPTER XXVI.

“ Her chariot is an empty hazel-nut,
Made by the joiner *squirrel*, or old grub,
Time out of mind the fairies’ coach-makers.”

As the objects which natural history presents, are so exceedingly numerous, and especially as it is not our design to impose on the memory a burdensome task, which might interfere with other necessary studies ; but rather by the way of an agreeable amusement to lead to the delightful contemplation of the wisdom, power, and beneficence of the Creator, displayed in his works, we shall, in pursuance of our original plan, without descending to minutiae, go forward to some of the most striking objects of the animal creation ; and in this undertaking we hope to be able to season instruction with pleasure.

We might, indeed, take up some time with elaborate descriptions of the Guinea-pig—an animal of diminutive size, and inconsiderable utility, in comparison of many others ; and which is often domesticated among us ; as also the spotted cavy, the

agouti, and many others too numerous to examine in detail, most of them natives of South America, or other distant regions, and seldom seen in Europe; but knowing well the value of time, and the importance of other studies, we shall endeavour to exhibit such objects as are more particularly interesting. We cannot, however, omit to take notice of

THE SQUIRREL,

A beautiful little animal, equally remarkable for the elegance of its form, the liveliness of its disposition, and the agility of its motions. It is gentle and harmless: though naturally wild, it is easily domesticated; and although excessively timid, it soon becomes familiar.

The head, body, tail, and legs of this elegant little quadruped, are of a bright brown colour; the belly and breast are white, its eyes black, large, and full of vivacity; but its tail, which is long and umbrageous, constitutes its greatest singularity, as well as its principal ornament. It is also not less useful than ornamental; for being sufficiently large and bushy to cover the whole body, it serves as an excellent defence against the inclemencies of the weather. It also greatly assists it in clinging and adhering to trees; and Linnæus, as well as other naturalists, assures us, that in crossing a river, the squirrel places itself upon a piece of bark, and erecting its tail, in order to catch the wind, uses it as a sail, and thus commits itself to the mercy of the waves. It would certainly be both curious and interesting to be an eyewitness of one of their voyages, and a benevolent heart could not forbear wishing safety and success to the little navigators. The fact, indeed, would appear incredible, were it not attested by such respectable evidence. If, however, it be true, it exhibits a striking specimen of animal instinct, although not more wonderful than many others which are displayed in the brute creation.

The squirrel lives in woods and groves, and makes its nest of dry leaves in the hollows of trees: it seldom descends to the ground, but leaps from tree to tree with astonishing agility. It sits up to eat, and feeds itself with its fore-paws. Its food consists of fruits, nuts, acorns, &c. of which it accumulates a plentiful store for its winter provision. In the spring it feeds on young shoots and buds, and is extremely fond of the cones of the fir-tree. This beautiful little animal, by its sportive bounds from tree to tree, enlivens the sylvan scene, and merits the benevolent protection of man on account of its docility and innocence. Being naturally fond of warmth, it will, when domesticated, creep into a person's pocket, sleeve, or bosom, with the most perfect confidence and familiarity.

Of this animal, zoologists have enumerated a variety of species,



No 2



Rider Del.

RHS Sc.

No 1 SQUIRREL.

No 2 BEAVER.

some of which are to be met with in almost every country. Among these, are the grey squirrel, the fur of which is very valuable; the black squirrel of Mexico; the Barbary and the palm squirrel; the fat squirrel, which, among the Romans, was esteemed a great delicacy for the table, and which they kept and fed in places constructed for that purpose, and distinguished by the name of *gliraria*, and many others. In conformity, however, to the conciseness of our plan, we shall only observe

THE FLYING SQUIRREL,

Which is peculiarly distinguished by a membranous continuation of the skin of the sides and belly, extending from the fore to the hind feet. By this appendage, it is so much assisted in making bounds from tree to tree, that it frequently springs to the distance of twenty or thirty yards. Its skin is remarkably fine and soft, being covered with a beautiful fur, of a dark colour in some parts, and a lighter in others. Its head is small and elegant. It is mild in its disposition; but, although easily tamed, it is difficult to retain in a state of domestication, and seizes the first opportunity of making its escape. It is less than the common squirrel: it lives in trees, sleeps in the day, but exhibits its activity in the night.

The membranous appendage connecting its legs, being stretched out in the act of leaping, extends the surface of the body, by which it is better supported by the air, and the acceleration of its fall is retarded. This gives it the appearance of flying, from which its name has originated.

THE JERBOA

Merits particular attention, on account of the allusions made to it in the Scriptures, it being the *Damon Israel*, or *Lamb of Israel* of the Arabs, and is supposed to be the coney of holy writ, which was classed among the unclean beasts; our rabbit, or coney, being unknown in Palestine. It is also the mouse mentioned in the book of the prophet Isaiah, chap. lvi. verse 17. It is a lively and harmless animal: it lives on vegetation, and burrows in the ground like the rabbit.

The jerboa is remarkable for the singular construction of its legs, the fore ones being not more than one inch in length, and used not for walking, but for conveying victuals to its mouth. The hind-legs are naked, and like those of a bird, with only three toes on each foot. Its hair is long and soft, reddish on the back, and white on the belly and the breast, with a large black band across the thighs, in the form of a crescent. Its tail is longer than its body, and terminates in a black tuft, tipped with white. Its head

very much resembles that of a rabbit; but in size, this animal is somewhat less than a rat.

This singular quadruped is chiefly found in Barbary, Egypt, and Palestine: there are also some species of it in Siberia, Tartary, and some other parts of Asia. It makes its nest of the finest herbage, rolls itself up with its head between its thighs, and during the winter remains in a torpid state without taking any food. When pursued, it springs with such agility, that its feet scarcely seem to touch the ground. It is easily tamed, appears fond of warmth, and, by wrapping itself up close with hay, it seems to be sensible of the approach of cold weather.

THE KANGAROO

Is an animal unknown to the naturalists of former ages, and for the knowledge of which we are indebted to the improvement of navigation, and the discoveries of modern times. It is a native of New-Holland, where it was first discovered by Sir Joseph Banks. Its head, neck, and shoulders are small, the lower parts of the body much thicker, especially towards the rump. Its ears are large and erect, the end of the nose black, with whiskers on both the upper and lower jaws. Its tail is long and taper, being very thick near the rump, and narrowing to a point. But the most remarkable singularity in this animal is the construction of its legs, in which it resembles the jerboa. The fore-legs are extremely short, and only used for digging in the ground, or carrying its food to its mouth. It moves entirely on its hind-legs, which are nearly as long as its whole body. On these it springs with such strength and rapidity, as to outstrip the fleetest greyhound, making successive bounds of ten or twelve feet.

It leaps from rock to rock in an astonishing manner, and over bushes seven or eight feet high, without apparent effort.

The Kangaroo is generally of an ash colour: it feeds entirely on vegetables, and its flesh is wholesome and palatable food. There are two kinds, a larger and a smaller; the largest that has been shot weighed 140 pounds, and measured in length, from the point of the nose to the rump, four feet, and its tail two feet one inch: the length of the fore-legs was one foot, and that of the hind-legs two feet eight inches. The smaller kind seldom weighs above 60 pounds.

This animal is furnished with a pouch, in which its young are fostered; but its astonishing agility, under such seeming disadvantages, is the most striking circumstance by which it is distinguished, and which demonstrates that the Author of Nature can communicate activity and vigour to any conformation of parts.

THE KANGAROO RAT

Is a native of the same country, and may be regarded as an epitome of the above-described animal, which it exactly resembles in its construction, and differs from it only in size, being no bigger than a rabbit: it lives on vegetables, and burrows in the ground.

It is worthy of observation, that the Kangaroo is the only quadruped that is good for food, yet discovered in the country of which it is a native; this circumstance, however, may lead us to observe, that such is the diffusive goodness of the Creator, and such his providential care in providing for the support of man, that every country yet known produces some supply of animal, as well as vegetable sustenance.



CHAPTER XXVII.

THE RAT KIND.

..... "The savage rat,
When tam'd and taught, to gazing crowds is shown."

WE shall now make a transition from an agreeable and inoffensive species of animals, to another of more noxious propensities, which, notwithstanding their diminutive size, are capable of giving us much trouble, and serve to show that the Author of Nature can produce inconveniences as well as benefits to mankind, by the slenderest means. Of this truth we may find sufficient demonstrations in taking a view of the Rat kind.

THE GREAT RAT

Is an animal well known in England, although supposed to have come originally from Norway. From whatever country it came, or by whatever means it was introduced, it has been found impossible to expel this formidable invader. Before the arrival of this troublesome stranger, England was infested with the black rat, which was much less injurious than its rival; but the species is now almost extinct; being nearly extirpated by the Norway rat, which is much superior in strength, voraciousness, and ferocity. The latter, which is now universally diffused throughout the country, is about nine inches long, of a grey colour, and the throat and belly of a dirty white: its tail is as long as its body, and nearly destitute of hair.

Though small, weak, and contemptible in its appearance, it is a more formidable enemy to mankind than those that possess the

greatest strength. No art can counteract its various powers of annoyance, and force is ineffectually opposed to an adversary possessing such a variety of means to baffle its efforts.

The rat is a bold and fierce animal; its bite is keen, and the wound it inflicts painful and difficult to heal. Its rapacity has no bounds; for it preys on every creature it is able to subdue, and does incalculable mischief among grain and fruits. It refuses scarcely any article of food, and few places are secure from its depredations.

A numerous host of enemies combine for the destruction of this noxious quadruped. Several kinds of dogs pursue rats with eagerness, and kill them, although none will eat their flesh. The cat is also one of their formidable adversaries; but the weasel is their most determined enemy, and hunts them with unceasing avidity. The ferret is also employed in the same business: and mankind have employed the various means of traps and poison, in order to destroy these troublesome intruders; but no method hitherto discovered has been able to effect their extirpation. The sagacity of these animals in avoiding the traps and snares laid for them, is astonishing and well known; and their various means of eluding danger, together with their amazing fecundity, producing from twelve to eighteen young at one time, render ineffectual the united efforts of such a multitude of enemies as combine for their destruction. Their numbers would indeed increase beyond all power of restraint, but that an insatiable voraciousness impels them to devour one another, and the weaker invariably fall a prey to the stronger.

M. St. Pierre informs us, that in the Isle of France, rats are so extremely numerous, that at sun-set they may be seen running about in all directions, and frequently destroy a whole crop of corn in a single night. In some of the houses they swarm so prodigiously, that thirty thousand have been killed in a year; they have also subterraneous magazines of corn and fruit, and even climb the trees to devour the young birds.

Kæmpfer asserts, that the Japanese have a method of taming these rats, and of teaching them a variety of entertaining tricks, which are occasionally exhibited for the amusement of the populace.

It is a singular circumstance in the history of these animals, that the skins of such as have been found devoured in their holes, have been curiously turned inside-out, every part, even to the ends of the toes, being completely inverted.

THE MARMOT

Has been frequently classed by some naturalists with the rat kind, while others refer it to that of the hare; and in size it ap-

proaches much nearer the latter than the former species; but if we examine the construction of its parts, it will be found in some respects to agree with both these quadrupeds. Its head, nose, and lips, resemble those of the hare; while its ears, teeth, and claws, are like those of the rat. In many of its habits it is distinguished not only from these, but from most other animals.

The tail of the marmot is short and bushy, the hair on the back is brownish, and on the belly reddish: its voice resembles the murmuring of a young whelp; when irritated or affrighted, it becomes loud and piercing. It feeds on insects, roots, and vegetables; but when tamed, is very fond of milk and butter. They often feed in flocks, and place one as a sentinel, in order to give the alarm in case of danger, which is done by making a kind of whistling noise: and the party immediately betake themselves to their holes, which are formed with great art in the sides of the mountains, their ordinary habitations. In these burrows, which have two narrow entrances, the provident creatures lay up a store of moss and hay for the winter, and in that season they shut themselves up so effectually, by stopping up the entrance with earth, that they cannot easily be discovered. The interior apartment, where they lodge, is sufficiently spacious to contain a whole family of ten or a dozen of these animals. Here they roll themselves up with hay, and remain all the winter in a torpid state, regardless of the inclemency of the season, and the storm that rages without. Such are the wonderful instincts given by a wise and gracious Providence to these animals for their preservation.

The marmot is easily tamed, and then becomes very playful. It obeys the voice of its master, and easily learns to leap, dance, and play many frolicsome gambols. It has a great antipathy to dogs, and readily attacks them with great fierceness. It often sits upright, and walks with ease on its hind-legs. It feeds itself with its fore-paws like a squirrel, and is on the whole a diverting little animal.

The marmot soon arrives at maturity, and consequently its life is limited to a short period, being seldom found to exceed nine years. It breeds once a year, and generally produces three or four at a litter. The highest regions of the Alps are the usual abode of this animal: it is also found, with variations, in Poland and Tartary.

THE LEMING, OR LAPLAND MARMOT.

This animal presents one of these singular phenomena, which to the curious observer of Nature, have always appeared particularly striking, and is distinguished from all other quadrupeds by habits peculiar to itself, and for which it puzzles philosophy to

account. It is found only in the northern parts of Europe, where immense numbers of these little animals sometimes overspread large tracts of country, especially in Lapland, Sweden, and Norway. Their appearance happens at uncertain periods, but fortunately for the inhabitants of these countries, not oftener than once or twice in twenty years. As the source from whence they originate in such astonishing numbers, is yet unexplored by the naturalist, it is no wonder that the ignorant Laplander should seriously believe they are rained from the clouds.

This creature is somewhat less than a rat, and runs very swiftly, although its legs are short and slender. Its head is of a pointed form; and in each jaw it has two cutting teeth, with which it bites very keenly: its eyes are small, and its ears short: its fore-legs are shorter than the hind ones. The colour of its body and head is tawny, and variegated with large black spots, irregularly arranged; and the belly is white, tinged with yellow.

The leming must be prolific beyond conception; but the most astonishing circumstance of the natural history of these animals, is their destructive migrations. Myriads pour down from the mountains, and form an overwhelming troop, which nothing can resist. The disposition of their march is generally in lines, about three feet asunder, and exactly parallel. In this order they advance with as much regularity as a well-disciplined army; and it is remarked, that their course is always from the north-west, or south-east. They frequently cover the extent of a square mile, travelling in the night. They always halt in the day, and in the evening resume their march. No opposition can stop them, and whatever way their course is directed, neither fire nor water can turn them out of their road. If a lake or river happen to intercept their progress, they instantly take the water, and swim across, or perish in the attempt. It seems, indeed, as if they were impelled by some secret impulse, which prevents them from ever deviating from their direct route; for if a fire interrupt their course, they instantly plunge into the flames; if a well, they dart down into it; if a hay-rick be in their road, they eat through it; if a house, they climb over it, and never turn an inch out of their way. If thousands perish, thousands still supply their place, until the whole column be destroyed. Happily for mankind, they eat nothing that is prepared for human subsistence; and if they force their passage through a house, they will not touch any thing except such roots or vegetables as they may happen to find in it. If a man, or any animal, should chance to fall in their way, the little animals are no way discouraged by any disproportion of strength; but fly furiously at their opponent, with a barking noise, like that of a young whelp, and nothing can induce them to relinquish the attack.

Wherever they pass, they destroy every trace of vegetation, and when subsistence fails, they are said to divide into two different armies, which engage with the most deadly hostility, and continue fighting and devouring each other, till they are all entirely destroyed: such myriads of them have been found lying dead, that the air has been infected, and sometimes caused malignant distempers: numbers of them are also destroyed by foxes, weasels, &c. which follow them in their march, so that from what place soever they come, none ever return from their migrations. Contemplating the singular history of this animal, we would ask, whether the God of Nature be not wonderful in his works?

THE MOUSE

Is an animal which is diffused throughout almost every part of the world: it seems to be a constant attendant on man, and is seldom found but near his dwelling. When viewed without that prejudice which most people entertain against this creature, it is a pretty little animal. In its general formation, as well as its colour, it resembles a rat, but without that aspect of ferocity by which the latter is distinguished. Its skin is sleek and soft, its eyes lively, all its limbs are formed with delicacy, and its motions are quick and active. In this animal, as well as in the rat, the long naked tail has the most disgusting appearance.

The mouse produces young several times in the year, and has generally ten or a dozen at a litter; and in fifteen days, the young ones are able to provide for themselves. Aristotle says, that having shut up a mouse big with young, in a vessel, and provided plenty of grain for their support, he found shortly after a hundred and twenty mice, all produced from this maternal stock. Indeed, as the enemies of this animal are numerous and formidable, nothing but this amazing fecundity can save it from utter extinction.

In contemplating the prolific nature of these diminutive animals, the mouse and the rat, some reflections on the wonderful plan of creative wisdom, readily occur to our mind. These we have already suggested in the general view of the animal world, and future observations will often recall them to consideration. We have already observed, that mankind use every art, and contrive every possible method for the extirpation of the rat and the mouse, and that not only the cat but every animal of the weasel kind, as well as a multitude of others, are their implacable enemies, persecute them with unceasing hostility, and combine with man for their destruction. Infinite wisdom, however, has, in bestowing on these creatures an extraordinary fecundity, counteracted all the efforts used for their extermination. Their

depredations in our houses, our barns, and our granaries, induce us to esteem them noxious and troublesome animals; but are we sure that they answer no beneficial purpose? Are we certain that they do not prevent the propagation of some other creature more noxious than themselves? This, although yet undiscovered, is not impossible. Our shortsightedness does not permit us to penetrate the all-wise designs of the Creator. On reviewing his work, he "saw that it was good." (Gen. chap. i.) And, as he created every species of animal life for some wise purpose, he has with equal wisdom taken measures to prevent their extinction.

There are several varieties of the mouse, which for brevity's sake we shall omit, and proceed to something more interesting. They all have a pretty near resemblance: the principal difference is in the shrew-mouse, which, with a body of the same shape and colour, and nearly of the same size, as that of the rest of the kind, has the head and nose shaped like those of the swine, and is in some places called the pig-mouse.

THE MOLE

Is an animal which merits, in no small degree, the attention of the naturalist; for being destined to a subterraneous life, its conformation is admirably adapted to its peculiar mode of providing subsistence. It possesses, in an eminent degree, the senses of hearing and smelling; of which the former gives it notice of the approach of danger, and the latter enables it to find its prey in the obscurity of its dwellings under the surface of the ground. It is not destitute of sight, as has formerly been supposed: its eyes indeed are extremely small; but it is more than probable, that they are so formed, as to admit distinct images of the diminutive objects of its pursuit. The wisdom of the Creator is evidently and invariably displayed in the adaptation of each creature to its particular mode of living, of which we have in this curious little quadruped, a remarkable instance. While the mole enjoys that perfection of hearing and smelling, so necessary to its peculiar mode of living, its optics appear perfectly adapted to its contracted sphere of vision. The piercing eye of the eagle, would, to this animal, be not only useless, but manifestly inconvenient.

The whole form of its body, but particularly the construction of its fore-feet, are admirably adapted to the purpose of making its way in the earth with facility. They are destitute of hair, and have a broad palm, almost resembling a hand; but they are fixed so close to the body, that the animal can scarcely be said to have any legs. It remains almost constantly under ground, and if it happen to be surprised on the surface, it burrows in an instant.

The skin of the mole is remarkable for its beauty, and if converted to a proper use, would probably be not less estimable for

its value. We are indeed informed, that an ingenious gentleman of Newcastle, has discovered a method whereby the exquisitely fine fur of this hitherto despised animal, may possibly become of great importance to the public. Being incorporated with other materials, it forms a stamen of peculiar strength and beauty for the purpose of making hats, superior to any hitherto used in that valuable branch of manufacture. Mr. Bewick adds, that the gentleman has obtained a patent for this useful discovery.

The colour of the mole is generally black, but some have been found with white spots, and others perfectly white. Its fur is very short, close set, softer than the finest velvet, or perhaps than the fur of any other animal; and, although it lives in the earth, it is always exceedingly clean and glossy. It is somewhat singular, that while the ermine and sable are sought in the recesses of their immense solitudes, in the rigorous climates and desolate regions of the earth, no use has been made of a fur, which in beauty is scarcely inferior to any that Siberia can furnish.

This animal is exceedingly prolific: it breeds under ground, where it form a commodious nest of moss or fine herbage. It makes its subterraneous tracks in various directions, and throws up here and there large heaps of mould, which are very prejudicial, and consequently render its destruction an object of attention to the farmer.

The desolation which these animals create in gardens and cultivated grounds, is indeed much greater than the generality of people would suppose possible. M. de Buffon informs us, that in the year 1740, he planted about sixteen acres of land with acorns, of which the quarter part was carried off by the moles; and in many of their subterraneous retreats, were found half a bushel, and in some a bushel. After discovering this circumstance, our author caused a number of iron traps to be constructed, by which he caught about thirteen hundred moles in less than three weeks.

Nature, which in every part of the animal creation, displays her diversifying energy, has formed several varieties of this animal. One species, found in Siberia, is of a beautiful green and gold colour, which varies with the light. The yellow mole of North America is larger than that of Europe, and, like the latter, is covered with a fur exquisitely fine, soft, and glossy; and another kind is found in Virginia, of a black colour, variegated with purple.

THE OPOSSUM

Is an animal of which Nature has formed several varieties; but all of them distinguished from every other quadruped, except the kangaroo, by having a pouch under the belly, in which the

female deposits her young immediately after they are brought forth, and nourishes them until they be able to provide for themselves.

This animal is nearly as large as a cat; but its general figure resembles that of a fox. Its legs are short, and its feet, or rather hands, are not unlike those of a monkey. The construction of legs and hands indicates its incapability of speed; but this disadvantage is counterbalanced by the facility and expedition with which it climbs trees, where it conceals itself in the branches, and surprises the birds that come within its reach.

The opossum is remarkable for possessing the faculty of suspending itself by the tail, and continuing for hours in that situation, from which it darts on its prey with surprising agility and unerring aim. By means of its tail, it can also fling itself from one tree to another. It is easily domesticated, but is not a very agreeable inmate, on account of a rank and disgusting odour that exhales from its skin. Its flesh is eaten by the Indians, and in taste, is said to resemble that of a young pig. * The Indians also dye its hair, and weave it into garters, and various other articles. This animal was, by M. de Buffon, supposed to belong peculiarly to America; but it is now found to exist in several of the oriental and South Sea islands.

THE FLYING OPOSSUM

Cannot be overlooked, among the uncommon varieties of this singular animal. Its ears are large and erect, and it is furnished with a membranous appendage connecting the legs, similar to that of the flying squirrel, and of which it makes use in the same manner to fly from tree to tree. Can we refrain to admire the power and wisdom of the Creator, which we see so conspicuously displayed in the various forms of animated nature?

This animal is also remarkable for the exquisite fineness of its fur, which is more delicate, and of a finer texture, than that of most other animals. It is of a beautiful dark colour, mixed with grey, and is extremely smooth and glossy: on the throat and belly it is white, and each hip is adorned with a tawny-coloured spot.

CHAPTER XXVIII.

THE MONKEY KIND.

“There roam the ape, the monkey, and baboon,
Fearless and fierce amid their native woods.”

It is now, when we are drawing towards the conclusion of our survey of the first great division of animated nature, that we are to prepare for the contemplation of objects still more curious and striking than those we have yet met with.

The objects of curiosity which we are now going to bring forward to view, are some of the most remarkable and interesting.

ANIMALS OF THE MONKEY KIND.

These are a race which consists of a greater variety of kinds, and makes nearer approaches to the human species, both in form and action, than any other class of animal beings.

Monkeys of different kinds have been brought into Europe, and exhibited for the amusement of those who delight in contemplating the wonders of the creation; but they are natives only of the warmest parts of the globe, and abound chiefly in the torrid zone, where they entertain with their frolics, and annoy with their mischievous pranks, the inhabitants of the tropical regions.

In those countries, indeed, they are sometimes amusing, but oftener troublesome neighbours, for their restless activity can be equalled only by their mischievous ingenuity.

In the woods of Africa, from Senegal to Ethiopia, on the east, and the Cape of Good Hope on the south, monkeys are exceedingly numerous. They also abound in all parts of India, and the oriental islands, as also in Japan, and the southern provinces of China; and they are likewise found in great numbers in every part of South America, from the isthmus of Darien to the river La Plata.

The numbers, and various species of these animals, have induced naturalists to distinguish them by three grand divisions, viz: *Apes*, or such as have no tails; *Baboons*, which have short tails; and *Monkeys*, which have long tails.

In the ape kind, we see the whole external structure impressed with a striking resemblance of the human figure, and endowed with the capability of similar exertions. They walk erect, and the conformation of their hands and feet exactly resembles that of ours. The baboon exhibits a less striking likeness of the hu-

man form. He generally walks upon all-fours, and seldom erect, except through the influence of instruction and constraint. These animals have short tails, long faces, and eyes deeply sunk in their sockets: they are extremely ugly, and their disposition is characterized by the most brutal fierceness. Some baboons are in stature as tall as a man, and far superior in strength.

The monkey kind is much less than the former, and appears still further removed from the human species. They are an active, lively, and mischievous race of animals, full of grimace and frolicsome gambols, fond of imitating human actions, prying and inquisitive, restless and troublesome, and exceedingly addicted to thieving. They sit upon their posteriors, but never walk erect.

THE OURANG OUTANG, OR WILD MAN OF THE WOODS,

Is found in the interior parts of Africa, in Madagascar, and in some parts of the East Indies; but the isle of Borneo is the place where it chiefly abounds. It avoids mankind, and resides only in the most solitary deserts. As this animal is the largest of all the ape kind, it also bears the nearest resemblance to the human form. Some of this species are said to exceed six feet in height. They are active, strong, and intrepid. They live wholly on fruits, nuts, and other spontaneous productions of the warm countries which they inhabit.

Several of these animals have been brought to Europe; but having been taken very young, it is probable that the coolness of the climate both softens their fierceness, and obstructs their growth; and none have been seen in those parts of the world, which exceeded five feet in height. Dr. Tyson, a learned physician and naturalist, gives an accurate description of one of the species, which was brought from Angola into this country; and in order to give an idea of this extraordinary animal, we shall delineate it in the words of that gentleman:

“The body was entirely covered with hair, the colour of which was perfectly black, and the texture of it bore a greater resemblance to the human, than to that of the brute: that which grew upon the head and the chin, was considerably longer than the rest. The face was like that of a man, the forehead longer, and the head round: the upper and lower jaws were not so prominent as in monkeys, but flat like that of the human race: the ears and teeth had likewise a greater similitude to the man than the brute: the bending of the arms and legs was the same: and in the whole figure of the animal, an affinity might be traced. The face, hands, and soles of the feet, were without hair; and in the palms of the hands, it had similar lines to those of the human race. The internal conformation was equally similar, except

that it had thirteen, instead of twelve ribs. In its passage to England, it had made many friends on board, towards whom it would show evident marks of tenderness, and used frequently to embrace them with the greatest affection. Monkeys of a lower species, it seemed to hold in absolute aversion, and would avoid that part of the vessel where they were confined. As soon as it was accustomed to the use of clothes, it became very fond of them, and would dress itself in part without any assistance, and carry the remainder to some of its friends, and make signs for them to complete the ornament. It would lie in a bed, place its head upon the pillow, and then pull up the bed-clothes to its neck, in the same manner as human beings are accustomed to do."

M. de Buffon says, that he saw one of these singular animals sit at table; wipe its mouth with a napkin after drinking; pour the wine into its glass; use a fork and spoon to carry the victuals to its mouth; put sugar into its cup; pour out the tea, and leave it to cool; and, in short, so exactly imitate human actions, that it was astonishing to see how completely instinctive sagacity was, in this creature, substituted for reason.

From these anecdotes, it appears that the ourang outang, at least the less and milder kind, may, when taken young, be easily tamed, and rendered extremely docile and tractable; but a very different picture is exhibited by travellers, of those which are found in the immense solitudes of Africa, as well as in some parts of the East, and especially in Borneo. They are not only exceedingly swift, but so strong, that one of them could overcome several men. It is therefore impossible to take them alive, especially as they generally go in companies, armed with thick clubs, with which they will not hesitate to attack the strongest and fiercest animals, not excepting even the elephant. And it is worthy of remark, that this is the only animal that makes use of any other weapons than such as are natural. In the island of Borneo, where the ourang outang chiefly abounds, it is hunted by the inhabitants in the same manner as the lion and the elephant; and even the king and his courtiers follow the chase of this animal, with great eagerness; for, although its resemblance to the human form might be supposed to procure it pity and protection, we shall scarcely wonder that it should not meet with either, when we consider the fierceness of its disposition, and its formidable hostility to man.

This singular animal has been described by several naturalists and travellers, particularly by Battel, Bosman, Schouten, M. La Brosse, M. Grose, and Pyrdard. Their descriptions are all interesting, but too long for insertion, especially as our design is rather to give that general knowledge of Nature, which every

gentleman ought to possess, than to direct the attention to those minutiae which are more particularly suited to the investigations of such as make these studies their peculiar profession. We shall only observe, that all these accounts of the ourang outang, although they somewhat differ in certain minute particulars, agree upon the whole; and the differences discoverable in the relation of travellers, are only such as may reasonably be supposed to exist between different individuals of the same species, in the endless diversity of Nature's ever-varying form.

We have been somewhat particular in exhibiting the external structure and characteristic disposition of this extraordinary creature, since it must be considered as one of the wonders of Nature, which shows how nearly the animal may approach to the human form, and how much instinct may, in some respects, imitate intellect. In the latter comparison, however, we cannot but perceive an immense disproportion. The ourang outang soon attains to the perfection of its imitative operations, and arrives at a boundary which it cannot pass. Instinctive sagacity it appears to possess in an eminent degree, but exhibits no marks of intellectual operation, no traces of reason; between matter and mind, there will always be an immense interval. The near approach of this animal to the human form, without possessing any of the faculties of the human mind, will undoubtedly excite our gratitude to the beneficent Creator, for the high prerogatives accorded to us in the inestimable gift of intellect.

THE LONG-ARMED APE

Is the animal which, next to the ourang outang, bears the nearest resemblance to the human form. It has no tail, and walks erect: its ordinary stature is from three to four feet: its visage is flat, of a tawny colour, and encircled with grey hair: its eyes are large and sunk; and, on the whole, it has a remarkable singularity of aspect. But the most striking distinction of this animal, is the extraordinary length of its arms, which reach to the ground when it stands in an upright posture. It feeds on the fruits, leaves, and bark of trees; is of a mild and tractable disposition; and, like all the ape and monkey race, is fond of imitation. It is a native of India, and several of the oriental islands.

THE BABOON

Differs from most animals of the ape kind, not only in external formation, but in its disposition, which is fierce and untractable. There are several varieties of this animal, which altogether constitute a fierce and formidable race. The baboon is exceedingly strong; its body and limbs are thick; its tail is about eight

inches long ; its height, when standing upright, from four to five feet. Its head is large ; and its shoulders, which are of an amazing thickness, indicate its prodigious strength : its eyes are small, and deeply sunk ; its teeth are large and formidable ; and in each cheek it has a pouch, into which, when satiated with eating, it puts the remainder of its food. Its body is covered with hair of a light reddish brown ; that on the head is long : the buttocks are generally of a red colour, and naked.

This animal is of so ferocious a disposition, that neither art nor caresses can render it docile or tractable : it is not, however, carnivorous, but feeds entirely on roots, fruits, and other vegetables. It inhabits the hottest parts of Africa ; and numerous troops sometimes enter the cultivated parts, and plunder the gardens and fields.

One of these animals, seen by Mr. Pennant, at Chester, was of surprising strength, and extremely fierce ; it went on all-fours, and never stood erect unless compelled by its keeper, but would frequently sit on its rump in a crouching attitude, with its arms crossed before the belly. It was particularly fond of cheese and wheat ; and whenever any ears of the latter were given to it, it dexterously picked out the grains with its teeth, and ate them. Its voice was a kind of roar, somewhat like that of a lion, except that it was low, and rather inward. This species is remarkably fond of eggs ; and one of them has been known to put eight into his pouches at once ; then, taking them out singly, he broke them at the end, and swallowed their contents in the most deliberate manner.

THE GREAT RIBBED-NOSE BABOON,

Like that which has just been described, is a native of Africa, and inhabits only the hottest parts of that continent. This animal is not less remarkable for its strength and size, than for the variegated beauty of its colours. Its nose is marked on each side with broad ribs, of a fine violet colour ; a line of vermilion runs from above the eyes, on each side of the nose, and meets on the tip. The inside of the ears is blue, and the outside vermilion ; the rump is also of a vermilion colour ; and the beautiful shades on the hips are gradations from red to blue. The back and legs are dark brown, mixed with yellow : the breast and belly are white, and spangled with small dark spots ; its beard is dark at the roots, orange at the middle, and yellow at the end : the hair on the forehead is long, and turns back in the form of a crest : its tail is short and hairy, and its hands and feet black and naked.

Of this kind of animals, naturalists enumerate a great many varieties—among which are the small ribbed-nose baboon, and the

ursine baboon, which abound near the Cape of Good Hope, where troops of them assemble together, and make predatory expeditions, in order to plunder the plantations and orchards. In these inroads, they observe the greatest precaution, and place a sentinel in order to prevent surprise. The sentinel thus placed, gives a loud yell on the approach of a man, and the whole troop retreat with the utmost precipitation. On these occasions, it is highly entertaining to see the females running away with their young ones clinging to their backs, whilst their pouches are crammed full of bread. Sometimes they form a line, and with admirable dexterity throw the fruit from one to another, in order to carry it off with greater expedition.

THE PIG-TAILED BABOON

Is chiefly remarkable for being gentle and tractable, lively and frolicsome, without that impudent petulance, or that savage ferocity, so common to most of the baboon race.

THE DOG BABOON

Is distinguished by a longer tail than the rest of this numerous tribe, and seems to form the connecting link between the baboon and the monkey kind. It inhabits the hottest regions of Africa and Asia. It is above five feet high, and exceedingly strong, vicious, and impudent. These animals herd together in troops, and commit great depredations. Such, indeed, are the general propensities of all the ape, baboon, and monkey kinds, all of which are active, cunning, and mischievous creatures, and troublesome neighbours.

From the baboon race, we shall proceed to take a slight view of the monkey species—a class of animals weaker and less formidable than the former, but equally dexterous, crafty, and mischievous.

The varieties of the monkey tribe are so numerous, that it is difficult to describe the different species, or even to enumerate their characteristic distinctions. Every country of the torrid zone swarms with these restless, petulant, and troublesome animals; and every forest is enlivened by their restless activity and frolicsome gambols. The inhabitants of the tropical regions regard monkeys as one of their greatest pests, as they often do incredible damage among their fields of Indian corn and rice, and indeed are not less destructive to fruit. Their method of plundering resembles that of the baboons, and is conducted with equal dexterity, sagacity, and caution. They are also very troublesome to travellers, by pelting them with stones, dirt, and branches of trees.

Monkeys have an extraordinary attachment to their young.

This, indeed, is the most laudable trait of their disposition. Both the male and female alternately fondle the little cub in their arms, and endeavour to instruct it in all their own sagacious arts and frolicsome pranks. If the bantling appear disinclined to profit by their example, or refuse to imitate their actions, the parents overcome its obstinacy by well-applied chastisement.

The general food of this tribe of animals is fruit, buds of trees, or succulent roots and plants. Their method of managing an oyster is curious, and very entertaining to those who have an opportunity of witnessing their dexterity. The moment that the monkey sees the shells of the oyster a little opened, the crafty creature slips a stone between them, to prevent them from closing again, and then with its hand takes out the fish.

Of monkeys, naturalists have discovered above fifty different species: we shall therefore mention only a few of the most remarkable.

THE MACAQUE, OR HAIR-LIPPED MONKEY.

This animal is a native of Guinea, Congo, and the more southern parts of Africa. In size and strength, it nearly resembles the baboon: its nostrils are divided, like those of the hare: its visage is naked, ugly, and wrinkled; and its aspect, ferocious and disgusting. This kind is subdivided into several varieties, different both in size and colour. They are all, however, equally destructive in cultivated grounds, for being extremely nice in their choice, they do more damage by pulling up what does not please them, than by the quantity which they devour.

THE PATAS, OR RED MONKEY,

Is nearly of the same size with the macaque, and a native of the same country, but is much less frightful in its appearance, its aspect being more agreeable, and its hair of a bright red. These plunder plantations and corn-fields, like the former, and use the same precautions of placing sentinels, which most of the ape, baboon, and monkey tribes, adopt.

THE CATITRIX, OR GREEN MONKEY,

Is a beautiful animal. On the back and tail, it is of a fine green colour; and the throat and belly are of an elegant silver white. It is common in the Cape de Verd islands, in the north of Africa, and in many parts of the East Indies.

When Mr. Addison was in Africa, he killed twenty-three of this species, not one of which uttered the slightest cry, though they had previously assumed a threatening aspect, and ground their teeth at him as if in defiance.

THE TALAPOIN

Is about twelve inches long: its head is round: its ears are black, and shaped like those of the human species: the hair on the upper part of its body is yellow, tinged with green; but lighter on the throat and belly: its tail is olive-coloured, long and slender.

THE MONA, OR VARIED MONKEY,

Is a native of Arabia, Persia, and the northern parts of Africa, and is the best known in Europe of all the monkey tribe. Its back and sides are of a deep brown colour, with black freckles: the legs, feet, and tail, are black: the inside of the thighs, of a pale blue; and on each side of the tail there is usually a large white spot: the top of the head is yellow, freckled with black; its nose is short; its face of a dark lead colour, with the beard on each side long, and of a greenish yellow. When tamed, it will feed on all kinds of victuals, but is particularly fond of fruit.

The monkeys of America have several characteristics, which distinguish them from those of the old continent. Those of the latter are universally observed to have the posteriors naked and callous, their nostrils formed like those of the human species, and pouches on each side of the mouth for the purpose of preserving food. The monkeys of the new continent are different in all these particulars.

Of all the different species of this kind of animals which either continent produces,

THE MICO, OR FAIR MONKEY,

Is the most beautiful: its body is covered with hair of a silver white: its head is small and round: its face and ears are of so lively a vermilion, that it might be supposed the effect of art; but Nature, in the variety of her colourings, every where shows, that her paintings can receive no addition from the efforts of the pencil. The tail of this animal is long, and of a shining deep chesnut colour, and the whole assemblage of its colours and formation gives it an air of uncommon elegance.

The mico is a native of the countries of South America, bordering on the great river of Amazons; but we do not hear that it has ever been brought alive into Europe. M. de Condamine obtained one of these beautiful animals on the banks of that river; but did not succeed in bringing it alive into France, as he intended.

Having now exhibited a few of the most remarkable and best known varieties of this numerous, frolicsome, mischievous, and singular race, it will be observed, that we have only very slightly

touched on this subject of Nature's diversity. Naturalists have enumerated, and travellers have observed, an almost endless variety of this little bustling class of animals; and there is scarcely any reason to doubt that the immense woods of the tropical regions, contain a number of species which have escaped the eye of every European observer. Although man has for so many ages been occupied in examining the operations of Nature, in the world of matter and of life, a great part of the immense abyss yet remains unexplored; and perhaps all his genius and industry will never be able to investigate that boundless diversity which the Omnipotent Creator has stamped on his works. If, however, we cannot comprehend the depths of his counsels, nor trace all the varieties of his productions, we can so far penetrate the great design of his plan, as to perceive that our happiness is its object: and explore the wonders of the creation sufficiently to discover that wisdom, power, and goodness, are every where conspicuously displayed.



CHAPTER XXIX.

THE AMPHIBIOUS KIND.

“ Domesticated otters, too,
Employ their skill for man.

THERE now remains only one more ramification of the quadruped race, which we purpose to exhibit to view. This is essentially distinguished from the rest of that class, by the faculty of living equally in the water and on the land, for which reason animals of this kind are usually denominated amphibious, as being inhabitants of two different elements. In these, the attributes of the Deity are not less conspicuously displayed, than in all the other classes of animated nature.

All quadrupeds of this nature, have this characteristic distinction, that although they are covered with hair, like the generality of their kind, they are furnished with membranes between their toes, which enable them to swim with facility. Some more nearly resemble the constant inhabitants of the deep, by having their hind-feet joined to the body like fins.

THE OTTER

May be said to constitute the first step of this gradation, between terrestrial and aquatic animals; the former of which it resembles in exterior appearance and internal conformation, and

the latter in its ability to swim, as well as in its habits, and mode of subsistence. The usual length of the otter is about two feet from the tip of the nose to the insertion of the tail: the head and nose are broad and flat: the mouth is formed like that of a fish: the neck is thick and short, the eyes are small: the tail is long, broad near the body, and gradually tapering to the point: the legs are short, but the joints are extremely pliant. The fur of this animal is of a deep brown, with two small spots on each side of the nose, and another under the chin.

The otter destroys great quantities of fish, of which it is remarkably fond, and which, indeed, constitutes its principal food. In pursuing its prey, it commonly swims against the current.

Otters are often taken in traps; and the hunting of them is with some a favourite diversion; the old otter will, in this case, defend itself against the dogs to the last extremity. They bite keenly, and it is not easy to make them quit their hold. An old otter will never leave its hold but with the loss of life, nor ever make any complaint for the severest wounds.

When taken young, these animals may be easily tamed, and many instances of the fact have been witnessed. Being accustomed in youth to obedience and restraint, they become perfectly domesticated, follow their masters, and employ for his service their talents in fishing.

A person who lived near Inverness, procured a young otter, which he brought up tame: it would follow him any where, and when called by its name was always obedient. When apprehensive of danger from dogs, it always sought his protection, and would fly into his arms for safety. It was frequently employed in fishing, and sometimes caught seven or eight salmon in a day. When tired, it always refused to fish any longer, and then was rewarded with as much fish as it could eat. When its hunger was satisfied, it always curled itself up quite round, and fell asleep, in which state it was generally carried home. This animal fished in the sea as well as in a river, and often took great numbers of codlings, and other fish. Its food was generally fresh fish; it was also very fond of milk. It is indeed remarkable, that notwithstanding the otter's avidity for fish, it will not eat it unless it be quite fresh. When it cannot be had in that state, these animals, if kept tame, must be fed with milk, pudding, &c.

We are told, by Mr. Bewick, of another person who kept a tame otter, which used to follow him with his dogs. It was very useful to him in fishing, by going into the water, and driving trout, and other fish, towards the net. It is worthy of remark, that the dogs, although accustomed to the sport of otter-hunting, were so far from offering it the least molestation, that they would not even hurt an otter when it was in their company; a striking

instance of the power of habit, in the modification of animal instinct.

Otters are, with some variations, found in most countries. In the marshes of Guiana, they are very numerous; they herd together near the banks of the rivers, and are so fierce, that it is not safe to approach them. Those of Cayenne are very large, weighing from ninety to a hundred pounds: they are of a dark brown colour, and their fur is fine, soft, and short. This animal is also found in North America, where it is called the minx, and is generally of a less size than in those countries, being only about twenty inches in length; but its fur is glossy and beautiful, and of a dark brown colour.

The small otter of Poland, and the north of Europe, is much less than the common kind. Its colour is a dusky brown; its fur, however, is very valuable; being, in beauty, esteemed next to that of the sable. Indeed, the fur of all this little tribe of animals, is more or less valuable, so that, although Nature has assigned their abode in the solitary recesses of deep rivers, and extensive morasses, they are still subservient to the use of man. In none of the species, however, is this utility so conspicuous as in that of

THE SEA-OTTER.

This is an animal of extraordinary importance in the commercial system of two of the greatest and most powerful empires on the face of the globe; for their skins are sold by the Russians to the Chinese, at the rate of eighty, and even sometimes a hundred rubles a-piece. In return for this particular article of export, the Russians receive some of the most valuable commodities of China, and thus the skins of these animals, together with a variety of others, which furnish to the fur trade an inexhaustible supply, constitute, as already observed, a lucrative branch of commerce.

The fur of the sea-otter is long and thick-set, generally of a beautiful glossy black, but in some of a fine shining silver colour. Its legs are thick and short, and the toes joined by a web. Its length from nose to tail, is about four feet or something more. The largest of these animals weigh eighty pounds.

The sea-otter is perfectly inoffensive, and affectionately fond of its young. For the loss of them, it will pine to death on the spot from whence they are taken away. Before its offspring can swim, it carries them in its paws, and, lying on its back, supports them in the water. When in this element, the sea-otter is exceedingly sportive, and as full of gambols as a monkey is on the land; for it swims in every position, on its back, sides, and even in an erect posture. It breeds once a year, and produces but one young at a time, which it suckles and carefully attends until

it be fit to provide for itself. The flesh of the young otter is reckoned very delicate, and scarcely distinguishable from lamb.

Kamtschatka, and the opposite coasts of America, with the numerous islands which lie between the two continents, are the countries where the sea-otter principally abounds, and which, with the rest of the furry tribes, render these barren and remote regions in the eastern extremity of Asia, of great importance to the Russian empire.

THE BEAVER

Is an animal in which the power of instinct appears in an eminent degree, and indeed exhibits itself in a form of which few traces can be found in the brute creation. Of all quadrupeds, it is the most industrious; and its labours seem to be the result of a social compact formed for mutual preservation, support, and convenience. If we contemplate this animal in its solitary state, we shall not find it distinguished by any superiority of instinctive sagacity above the rest of the quadruped race. It is by viewing it in its social condition, that we shall find its pre-eminence.

In the month of June, or at the latest in July, the beavers begin to assemble, in order to form a society, which continues the greatest part of the year. A company of two or three hundred is immediately collected. These arrive from different parts, and seem to be directed by an irresistible impulse, to one particular place, where they fix their abode. This is always by the side of some river or lake. If it be a running stream, of which the waters are liable to rise and fall, their first undertaking is to construct a pier, or dam, quite across, so as to form a dead water above and below. In some situations, the length of this dam is not less than a hundred feet, and frequently ten or twelve feet thick at the base. If we compare the magnitude of the work with the powers of the architect, it will appear enormous, but the solidity with which it is constructed is still more astonishing. That part of the river where the water is the shallowest, is commonly chosen, especially if there be a large tree growing on its bank. This tree they immediately set about gnawing down with their teeth, which is performed with astonishing speed and dexterity. Other trees are then cut down in the same manner, higher up the stream, which they float down by water to the dam, where, having, with their teeth, cut off the branches, they place them upright against the large tree, which constitutes the foundation of the whole work. While some are thus busied in fixing the stakes, others are employed in collecting twigs, interweaving and twisting them into the jetty-work; and a numerous party is occupied in collecting large quantities of earth, stones.

clay, and other solid materials, which they place on that side of the piles next the stream. By these joint efforts, they construct a mound of great strength, and capable of supporting the pressure of a considerable weight of water. When there is a lake conveniently situated for their purpose, this Herculean work of constructing a mound is unnecessary; and they never fail of choosing such a situation, if the face of the country afford them an opportunity.

The mole being completed, their next care is the erection of their houses. These are built on piles, close to the edge of the water, and are generally of a form either circular or oval. They mostly consist of three stories, of which the first is below the level of the dam, and consequently full of water. The apartments are about four or five feet in diameter, and the walls about two feet thick, neatly plastered on the inside with clay. At the top the building is arched like an oven, and resembles a dome. These edifices are constructed with such solidity as to be impenetrable to the heaviest rains, and to defy the force of the most impetuous winds. Each house has two openings, one for an excursion by land, the other for a ready entrance into the water, in order at once to render convenient the procuring of subsistence, and to facilitate the means of escape, in case of surprise. The number of houses in one of their settlements, is usually from fifteen to twenty-five. Each family has its own district, its own magazines, and its own habitation; and no strangers are ever suffered to intrude. Each beaver has its own bed of moss, and each family its own horde of winter provision, which consists principally of the bark and boughs of trees. The latter they pile up with great regularity, and use it as their wants require. In the front of their houses, facing the water, they leave an opening, which serves as a window, and at the same time as a balcony, where they can sit and enjoy the fresh air. They spend a great part of the day in bathing, and almost always retain in the water an upright posture, their head and fore-parts not being often immersed.

No predaceous animals dare attack the united republic of beavers, in their fortified settlements. Man is the only enemy they have to fear. Among themselves a profound peace always subsists, however numerous may be the inhabitants of their colony, which sometimes amount to three or four hundred. A common series of toil strengthens their union: the conveniencies which their joint efforts have procured, and the abundance of provisions which they have amassed, render them easy and happy in their respective families. Having moderate appetites, and entertaining an aversion to blood and carnage, they have neither inducements nor inclination to hostility and rapine; but enjoy a

tranquillity which it is a pity that human rapaciousness should ever disturb. This, however, is frequently done for the sake of their skins, and the drug called castorum, which is produced from this animal, and is found in a liquid state, in bags of skin about the size of an egg. This matter, when dried, is capable of pulverization. It is of an oily nature, of a pungent bitter taste, and of a disagreeable smell, but of considerable use and efficacy in medicine.

The skins of these animals vary in colour: in general they are of a chesnut brown, more or less dark, but the most valuable are black. These furs constitute a valuable article of commerce. Many thousands are annually imported into Europe from America. In 1763, the Hudson Bay Company sold 54,670 beaver skins at one sale.

The Indian hunters, lured by European commodities, explore the inmost recesses of the American continent, in order to discover the retreats of these inoffensive animals, and procure as great a number of skins as possible, which they barter chiefly for the noxious articles of spirituous liquors, and tobacco.

Commerce, like every thing else in this world, is productive of a mixture of good and evil. This is the case with all things here below. The ways of Divine Providence are inscrutable; but, in all probability, this mysterious dispensation is designed to teach us that our present life is no more than a state of probation, and to prevent our too ardent attachment to its temporary comforts and pleasures.

The wonderful animal of which we have just been displaying the disposition and habits, is remarkable for the size and strength of its cutting teeth, which enable it to gnaw down trees of great magnitude, with incredible facility and despatch. It does not bear in its aspect any striking impression of superior sagacity; its ears are short, and its nose blunt; its fore-feet are small, but its hind-feet large and strong, with membranes connecting the toes. Its length from nose to tail is generally about three feet: the tail is about eleven inches long, and three broad; being nearly of an oval form, flat and covered with scales. This tail, so different from that of other quadrupeds, serves not only as a rudder to direct its motions in the water, but as a most useful instrument for laying on the clay in constructing and plastering its habitations. The senses of the beaver are extremely acute; its smelling in particular is so delicate, that it will not suffer any filth, or any thing of a disagreeable scent, to remain in, or near, its apartments.

There are, at present, in the menagerie at Exeter 'Change, two male beavers, which are very tame, and will even suffer strangers to handle them. They frequently sit upright, to eat, or

to look about them, and often play with each other in a gay and frolicksome manner. If any thing moveable be put into their small apartment, they appear highly pleased, and drag it about, but have never been known to carry any thing about on their tails. They subsist principally on the bark of trees and bread but such is their propensity to gnaw timber, that they would soon eat their way out, if allowed the full range of a room.

We have been somewhat particular in giving a description of this extraordinary animal and its astonishing works—stupendous fabrics indeed they may be called, when we reflect on the simplicity of the means employed, and consider that their teeth, their feet, and their tails, are all the instruments which they use for the accomplishment of such great undertakings. The beaver, indeed, is a subject on which all zoologists have expatiated, and which exhibits a remarkable display of instinctive sagacity, worthy the attention of every mind that delights in contemplating the wonders of creation; especially when we consider the regularity with which their works are carried on, and the order and discipline which pervade their societies.

An overseer is always chosen among them, whose orders are punctually obeyed; and a smart stroke with his tail upon the water, is his word of command, whenever the united force of numbers is necessary to be applied. The same signal is also used on the approach of an enemy, to warn the society of its danger. On such occasions, each beaver, as he thinks it expedient, either conceals himself in his habitation, or plunges into the water, and immediately disappears.

Beavers are never found farther south than the thirtieth degree of latitude, but they are the most common from the fiftieth to the sixtieth, and much more numerous in the new than the old continent. They were known to the ancients, and the killing of them was forbidden by the religion of the Magi.

It may be asked, by what secret counsels are these animals moved to unanimity of design, by what power impelled to uniformity of action? They are guided by that Being who has regulated the propensities, the instincts, and operations, of all animal existence;—the God of Nature is their unerring director.

THE WALRUS, OR SEA-HORSE,

Is an animal perfectly amphibious, and far more attached to the watery element, than the beaver. In its habits, indeed, it seems to approach nearer to the nature of fishes, than to that of quadrupeds, although naturalists have generally included it in the latter denomination.

The sea-horse grows to a large size, and has sometimes been found eighteen feet in length, and twelve in circumference at the

thickest part. Its upper jaw is armed with two large tusks, sometimes above two feet in length, and weighing from twelve to twenty pounds. These teeth, together with its fat, are what stamp a value on this animal, as they are equal to those of the elephant, in beauty and durability; and the fat of a well-grown sea-horse, is said to yield half a ton of oil, equal in goodness to that of the whale.

The sea-horse is chiefly found in the northern seas. Great herds of them are sometimes seen basking on the shore, or sleeping on a field of ice. When alarmed, they throw themselves into the water with extreme precipitation. If wounded, they become bold and furious, and unite for their common defence. On these occasions, they will attack a boat, and attempt to sink it, by striking their teeth into its sides, bellowing at the same time in a most hideous manner.

The following anecdote, related in "Hearne's Journey to the Northern Ocean," may, perhaps, be deemed worthy of attention:—"In the year 1766, some of the crew of a sloop sailing to trade with the Esquimaux, were attacked in their boat by a great number of walruses; and notwithstanding every attempt to keep them off, a small one got in over the stern, and after looking at the men some time, again plunged into the water. Another of an enormous size then attempted to get in over the bow; and every other means proving ineffectual to prevent such an intrusion, the bow-man put the muzzle of a loaded gun into the animal's mouth, and shot him dead. He immediately sunk, and the people reached their vessel just before his enraged companions were ready to make a fresh attack."

This animal feeds on sea-weeds, and small fish. In climbing upon the rocks, and pieces of ice, it makes use of its teeth as hooks, to secure its hold, and then draws up its unwieldy body.

The white bear is an implacable enemy to the sea-horse; and dreadful conflicts are said to happen sometimes between them, in which the formidable tusks of the latter generally render it victorious.

THE SEAL

Is another amphibious animal, which seems to constitute one of the last steps of gradation between the race of quadrupeds and fishes, and which, although generally classed by naturalists among the former, appears to partake in a greater degree of the nature and habits of the latter. It is found, with some variation of species, in almost every quarter of the globe; but chiefly abounds in the northern seas of Europe, Asia, and America, and in the unfrequented regions towards the south pole.

The usual length of this animal is five or six feet. It is cover

ed with short hair of various colours, smooth and shining. It has five toes on each foot, which are armed with strong sharp claws, whereby it is enabled to climb the rocks, on which it delights to bask in the sun. On the unpeopled shores of the icy seas, under the arctic and antarctic circles, and still nearer to the poles, these animals may be seen by thousands on the rocks, or on the sandy beach. The female sits on her hind-legs while she suckles her young. The growth of seals is amazingly rapid, and the dam, after bringing them forth on the land, soon carries them with her into the sea, and teaches them to swim; when they are weary, she places them on her back. The old ones are very attentive to their young, which in their turn are docile and obedient.

The flesh of the seal was formerly esteemed a delicacy, although now but seldom eaten. That it was once admitted to the tables of the great, is evident, from its constituting an article in the bill of fare of that sumptuous entertainment given by the Archbishop Neville, in the reign of Edward IV., though perhaps scarcely a peasant in the kingdom would at this day be willing to make it a part of his dinner. Such is the change of manners, such the influence of custom.

If the flesh of this animal be fallen into disrepute, the oil produced by its fat is perhaps held in higher estimation, and sought with greater avidity, than at the period alluded to, or in any of the preceding ages: a young seal yields above eight gallons of this oil. Their skins are also very valuable, and are made into a beautiful sort of leather, used for shoes and various other purposes, so that if the seal be no longer considered as a delicacy of the table, it forms an important article of trade.

When taken young, these animals are capable of being tamed, and will even answer to a name like a dog. A seal was exhibited in London, in the year 1750, which would answer to its keeper's call, take food from his hand, stretch out its neck as if to salute him, and crawl in and out of the water at command. Another animal of the same species was so far domesticated, that though taken out to sea every day, and thrown in from a boat, it invariably swam after its master, and allowed itself to be retaken without any attempt to escape. When at home, it was generally kept in a vessel of salt water, but sometimes crawled about the house, and even approached the fire.

There are, as already observed, several varieties of this animal, of which the most remarkable are the Leonine and Ursine seals; but these we shall, for brevity sake, omit, especially as their general characteristics and commercial importance are nearly the same. We shall therefore pass forward to the last tribe of quadrupeds, which we wish to recommend to notice.

CHAPTER XXX.

THE BAT KIND.

"Now all is hush'd, save where the weak-eyed bat,
With short shrill shrieks, flits by on leathern wing."—COLLINS.

As the last described class of animals seems to connect the animal inhabitants of the earth with those of the seas, the tribe which we are now going to present to view, appears to join, in a similar manner, the former with the people of the air; so that between quadrupeds, fishes, and volatiles, there is no distinct interval, no chasm, in the long gradation of animal life.

THE BAT

Is distinguished from every other quadruped, by being furnished with wings; for which reason it is, by the peasants, generally ranked among volatiles, and some naturalists seem doubtful in what class of animal existence its station ought to be assigned. However, as it has all the characteristics of quadrupeds, Linnæus refers it to that class, to which indeed it is allied by its external and internal structure, while its resemblance to the volatile race consists solely in the faculty of flying.

THE COMMON BAT

Is well known, and frequently seen in England, as well as in almost every part of Europe. It is somewhat less than a mouse, and the extent of the wings is seven or eight inches. These are only membranous webs, resembling thin leather, and extending from the fore-feet to the tail: the hind-feet have each five toes, armed with claws; the body is covered with a very short and soft fur; the eyes are very small, and the ears like those of a mouse, to which animal it bears no small resemblance in its general aspect, but is somewhat darker in colour: it has four cutting-teeth in the upper, and six in the under jaw.

About the end of summer, this creature retires to caves, old buildings, and hollow trees, where it remains during the winter, in a state of torpidity. Some of them cover themselves close with their wings, and suspend themselves by their hind-feet; and others stick fast to old walls.

Bats are capable of being tamed, to a certain degree. Mr. White informs us, that he was once much amused with the sight of a tame bat, which would take flies out of a person's hand, and adroitly tear off the wings, which it invariably rejected. When any thing was given it to eat, it brought its wings round before the

mouth, hovering and concealing its head, in the manner of birds of prey, when they feed. Insects seemed to constitute its favourite food, though it would accept raw flesh when offered. Our author saw it repeatedly confute the vulgar opinion, that bats, when on a plain surface, cannot easily get on the wing again. It sometimes ran with tolerable despatch, but in a most grotesque and ridiculous manner.

Among the numerous varieties of this singular animal, are enumerated, the long-eared bat, the noctule, the pepistrelle, the balbastelle, the serotine, the horse-shoe bat, and a number of others. These we shall pass over in silence, as in this, like a multitude of other cases, it is scarcely possible to follow Nature in all her multiplied variety of forms.

All the bats known in Europe, are perfectly inoffensive; but in the tropical climates, they not only grow to a large size, but are of a more formidable nature. We shall give a concise description of two of the most remarkable species.

THE GREAT BAT OF TERNATE AND MADAGASCAR,

Is about a foot long, and four feet in breadth, when its wings are expanded. It has large canine teeth, and the tongue pointed: its nose is sharp, and its ears are large and naked. It has five toes on the hind-feet, armed with strong hooked claws: it has no tail, and its general colour is a dusky brown.

These formidable creatures are extremely voracious, and sometimes assemble in such prodigious flocks as to darken the air; devouring indiscriminately every kind both of vegetable and animal food that lies in their way. Buffon imagines, that the ancients borrowed from these creatures, their ideas of the harpies, and it must be acknowledged, that they correspond almost exactly with the description given by the poets, of those fabulous monsters; but that the ancients were acquainted with these animals, or with the countries where they are found, is extremely problematical. Like the fabulous harpies, their figure is uncouth, and their disposition fierce and voracious. A hundred or two of them may sometimes be seen hanging on a tree, with their head downward, and their wings folded, in which manner they repose during the day; but in the night they make a horrible noise in the forests. When young, they are eaten by the inhabitants of the countries where they are found, and are esteemed excellent food.

This animal, to which Buffon gives the appellation of the Roussette, abounds in Madagascar and Ternate. It is also a native of Guinea, and, according to Captain Cook, and other discoverers, is found in most of the islands of the South Sea.

THE VAMPYRE, OR SPECTRE BAT OF SOUTH AMERICA,

Is a most formidable and dangerous creature, and although not remarkable either for size or strength, is the common pest of men and animals, in those parts where it abounds; for it destroys every thing that has life, which it finds asleep and exposed to its attack. It sleeps in the day, and, according to Ulloa, comes abroad in the evening, when such multitudes make their appearance as to cover the towns and villages with a widely extended canopy.

The vampyre is the most terrible and dexterous phlebotomist in Nature. Its nose is long, and has at the end a membrane of a conical form, somewhat resembling a horn, but flexible, which not only gives it a hideous and disgusting aspect, but also furnishes it with a formidable and dangerous weapon, which it insinuates with inconceivable dexterity into the veins of any creature it finds asleep, without giving it sufficient pain to awake it. It is therefore extremely dangerous to sleep abroad in the countries where the vampyre is common, as it sucks the blood with such avidity, that persons attacked by it, frequently pass from a sound sleep to their eternal repose.

Captain Stedman, during his stay in Surinam, was attacked in his sleep by a vampyre bat, as appears in the following extract from his narrative:—"I cannot forbear," says the captain, "relating a singular circumstance respecting myself, viz. that on waking about four o'clock one morning in my hammock, I was extremely alarmed at finding myself weltering in congealed blood, without feeling any pain whatever. Having started up, I rang for the surgeon. The mystery, however, was, that I had been bitten by the vampyre, or spectre, of Guiana. Having applied tobacco-ashes as the best remedy, and washed the gore from myself and my hammock, I observed several small heaps of congealed blood all round the place where I had lain, upon the ground; on examining which, the surgeon judged that I had lost twelve or fourteen ounces during the night."

The vampyre is equally destructive to animals, as to the human race; for, according to M. de Condamine, it has, in many parts of South America, destroyed all the cattle introduced into the country by the settlers from Europe.

We have now exhibited to view, the most remarkable varieties of this curious species, which seem to link the quadruped with the volatile part of the creation. It would be useless, perhaps even impossible, to display all the distinguishing characteristics of the various tribes, which exist in every country, and are all

discriminated from one another by some peculiarity of form or disposition. We have already seen, that of several kinds of animals, especially those that are widely diffused, the varieties produced by difference of soil and climate, in conjunction with other circumstances, are innumerable, and baffle every effort of research. By this time, however, we have learned to observe, that amidst the infinitely diversified productions of creative power, various degrees of utility are not less conspicuous, than variety of form, and difference of faculties: composing one general and uniform plan, in every part of which, wisdom, order, and fitness, are eminently displayed.



CHAPTER XXXI.

CONCLUDING REFLECTIONS.

“Hail! Source of Being! universal soul
Of heaven and earth! Essential presence, hail!
To thee I bend the knee: to thee my thoughts
Continual climb: who with a master-hand
Hast the great whole into perfection touch’d!”—THOMSON.

WE are now come to the conclusion of our survey of the wondrous works of the Deity, as displayed in the quadruped race, and it is with reluctance, we take leave of so beautiful, so variegated, and so magnificent a view. At the close of our excursions, however, let us not have to reproach ourselves with having uselessly rambled through so material a part of the immense fields of creation. The object of all physical research ought to be moral and intellectual improvement; and indeed the study of Nature, as displayed in any part of the wondrous works of creation, exalting our admiration, is peculiarly adapted to inflame our love for the Architect of the universe, the self-existent Author of all existence. Our love of the Creator cannot, however, be more appropriately displayed, than by the exercise of universal benevolence towards his creatures. This important moral truth we have every where endeavoured to inculcate; and let it be impressed on the mind, and kept in memory, that

“The poor beetle that we tread upon,
In corporeal suffering feels a pang as great
As when a giant dies.”

This effusion of poetry speaks no other language than that of accurate philosophy; for there is every reason to believe, that the sensations of many of the most diminutive insects are as ex

quisite, and consequently their sufferings as acute, as those of larger animals. The writhings of the poor worm, on which we accidentally tread, evidently show the pangs which it feels, shock the heart that is endowed with sensibility, and force it to lament the step which fortuitously caused these sufferings. Horrible, however, to relate, parents too frequently indulge their children in the wanton sport of torturing poor insects in a manner at which humanity must shudder. Although this horrid propensity may, at that early period of life, be attributed to a want of reflection, yet, if indulged, it may settle into a habit of cruelty, and render their hearts callous, not only to the sufferings of the brute creation, but to those of their own species. A parent, indeed, who encourages his child to torture a poor helpless insect, ought not to wonder if he afterward see him a murderer of his fellow-creature, which will very probably be the case, unless a want of courage, strength, or opportunity, prevent the exercise of his cruelty, or the terrific dread of the gallows restrain his hands.

“What more advance can mortals make in sin,
So near perfection who with blood begin?”—DRYDEN.

The supreme court of judicature at Athens, to its eternal credit, punished a boy for putting out the eyes of a poor bird that unfortunately fell into his savage hands; and parents and masters should never overlook an act of cruelty towards any thing that is endowed with life and sensation, however minute and contemptible it may seem. No creature is mean or insignificant in the eyes of the Universal Parent, the Creator of all beings.

“With Him, no high nor low, no great nor small—
He fills, he bounds, connects, and equals all.”

Great and little, important and mean, are relative terms, and distinctions of our own, which have no existence in the all-comprising view of the Creator and Governor of the universe.

The consideration that all the felicity of animals is confined to the short period of the present life, without any hope or compensation in a future state of existence, ought to be an additional inducement to treat them with compassion. We ought to imagine every inoffensive animal, which our wanton cruelty would deprive of existence, addressing us in the mouse's affecting petition:

“But if this transient gleam of light
Be all of life we share,
Let pity plead within thy breast,
This little all to spare.”

These moral sentiments, so strongly inculcated by reason, are decidedly corroborated by religion, sanctified by scripture, and

impressed by the discourse of Him from whom all scripture derives its authority, and all true religion its origin. The Redeemer of mankind reminds us, that his Heavenly Father takes care to feed the ravens, and that the sparrows are not overlooked in the universality of his providence; which is sufficient to convince us that we cannot, without offering a gross insult to the Creator and Sovereign of the world, wantonly ill-treat any of his creatures, all of which are objects of his parental solicitude.

In the system of Nature, it is ordained, by an arrangement for which reasons have already been assigned, that animals should be conducive to the support of one another, and that all of them should be subservient to the interests of man, or at least subject to his reasonable will, although not to his wanton cruelty. When, therefore, we are obliged to kill any of them for our food, or to destroy for our safety such as are noxious, we ought to despatch them expeditiously, and render the pang of death as short and easy as possible.

In contemplating the formation of the different animal beings which browse the herb, or range the forest, which climb the tree, or burrow in the earth, we see a perfect adaptation to the circumstances of their existence. Their instincts, also, exactly correspond with their destination, and operate in a similar manner in every individual of the same species. This uniformity of instinct in each particular species of animals, which is so conspicuous in a thousand instances, merits, in an eminent degree, the attention of the student of Nature; as it exhibits the most unequivocal proof of a regular design and determinate plan in their formation, and evidently shows that the whole created system is the production of an intelligent and all-powerful Being,

. "Who spake the word,
And Nature moved complete."

Whether all animals were purposely created for the use and advantage of man, a theory which has long been doubted among philosophers, and is now almost entirely exploded, we shall not pretend to determine. When we consider their utility in furnishing us with food and raiment, and numberless conveniencies and comforts, we cannot but suppose that this important purpose has entered into the design of the Creator, and formed a part of his universal plan. And this consideration, which forcibly impresses itself on the mind, and which appears to be unquestionably just, cannot fail of exalting our piety and gratitude, by exhibiting extensive beneficence, acting in concert with infinite wisdom and power.

Besides the subserviency of the animal creation to man, there

can be no doubt that the happiness of the creatures themselves constituted a principal object in the view of the Author of Nature. It must, however, be acknowledged, that many animals exist of which we cannot perceive the utility. Many of them appear useless, and some of them noxious to man. Some of them likewise seem destitute of enjoyment, and incapable of happiness. But, are we able to penetrate into the secret recesses of Nature, to investigate the actions of every creature, to examine their consequences, and calculate how far they may be, if not directly and immediately, at least indirectly and ultimately, beneficial to our species? Or, are we able exactly to estimate the felicity of animals, or to explore the whole circle of their pleasures? Hither our inquiries cannot reach.

..... "Here the cloud
 So with eternal Providence, sits deep.
 Enough for us to know that this dark state,
 In wayward passions lost, and vain pursuits,
 This infancy of being, cannot prove
 The final issue of the works of God."

In this present state of existence, the limitation of our faculties prevents us from fully comprehending the wonders of the creation; this grand prerogative, this sublime enjoyment, is certainly reserved for rational beings, in a future and more happy state, when the mind, invigorated and expanded, having all its powers renovated and improved, shall be capable of boundless excursions, and of seeing the image of the Deity clearly reflected from his works.

In our present state of being, in which we see the mysteries of Nature and of Providence, as it were, but dimly through the veil that hangs before our eyes, Reason, that inestimable gift of the Divinity, is sufficiently illuminating to convince us, that we can only see by parts, and those parts but imperfectly; while the Supreme Intellect embraces in one comprehensive view the whole system of creation, and that whatever is the work of Infinite Wisdom, is destined to some useful and beneficial end. The lion and the tiger, which seem made only for annoyance, may have parts to act in the universal system highly beneficial to the whole, but of which we are totally ignorant; and the mole, condemned to a life of subterraneous darkness, apparently destitute of every source of enjoyment, may experience a degree of happiness suited to its nature, and of which we cannot form any conception. If we examine a complex piece of mechanism, and observe the regularity of its operations and movements, although we may not perhaps comprehend the utility of each part, and the particular action of each wheel or spring, yet in considering

that from the motions of the whole machine, some great effect is produced, we shall readily conclude that none of its parts are useless.

These observations, and a number of others, which naturally result from a survey of the animal kingdom, or other parts of the creation, have an evident tendency to improve the mind and meliorate the heart. They all concur to illuminate the understanding, and to inspire the most exalted sentiments of morality and religion; and to instruct the ignorant, to check presumption, and confound Atheism.

The volume of Nature is the book of God, ever open to the eyes of mankind; in contemplating any part of which, we every where view the reflection of his glory. All things, animate and inanimate, in perfect unison, and in language more emphatical than that of words, proclaim—

“THE HAND THAT MADE US IS DIVINE.”

THE END.

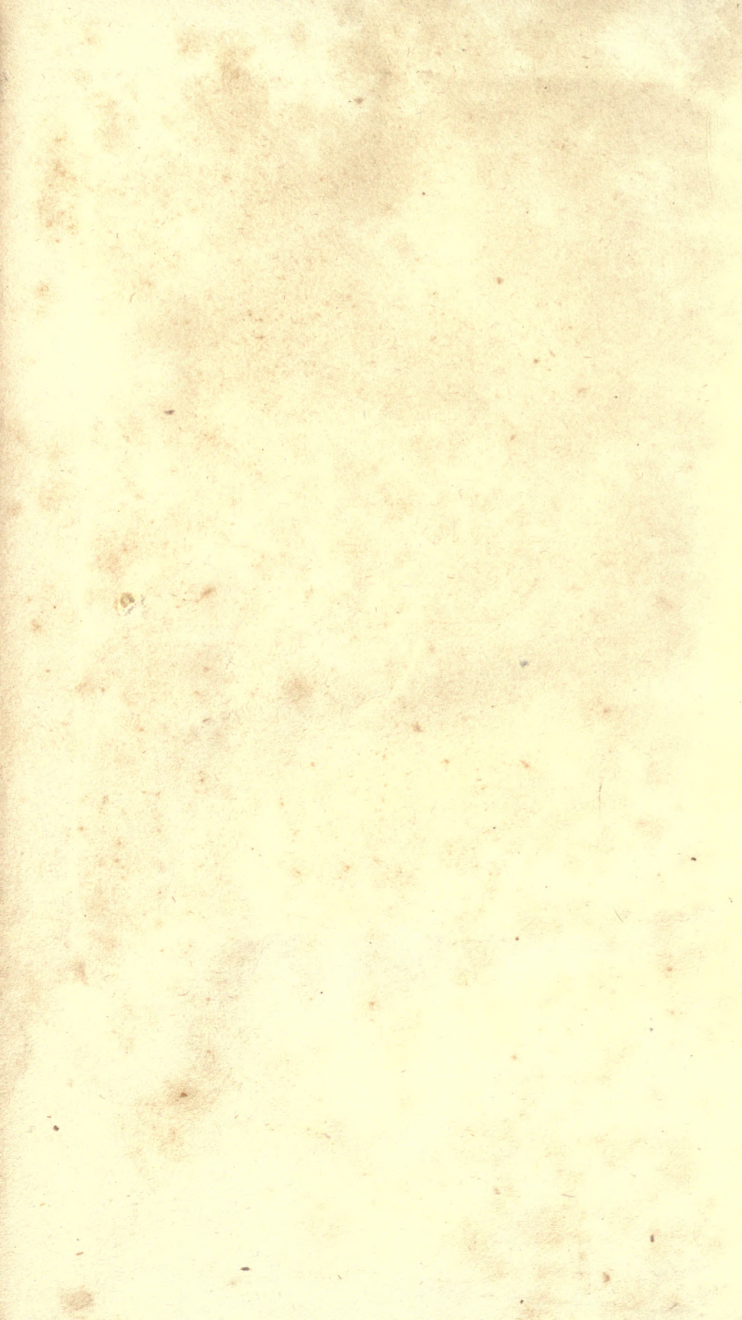


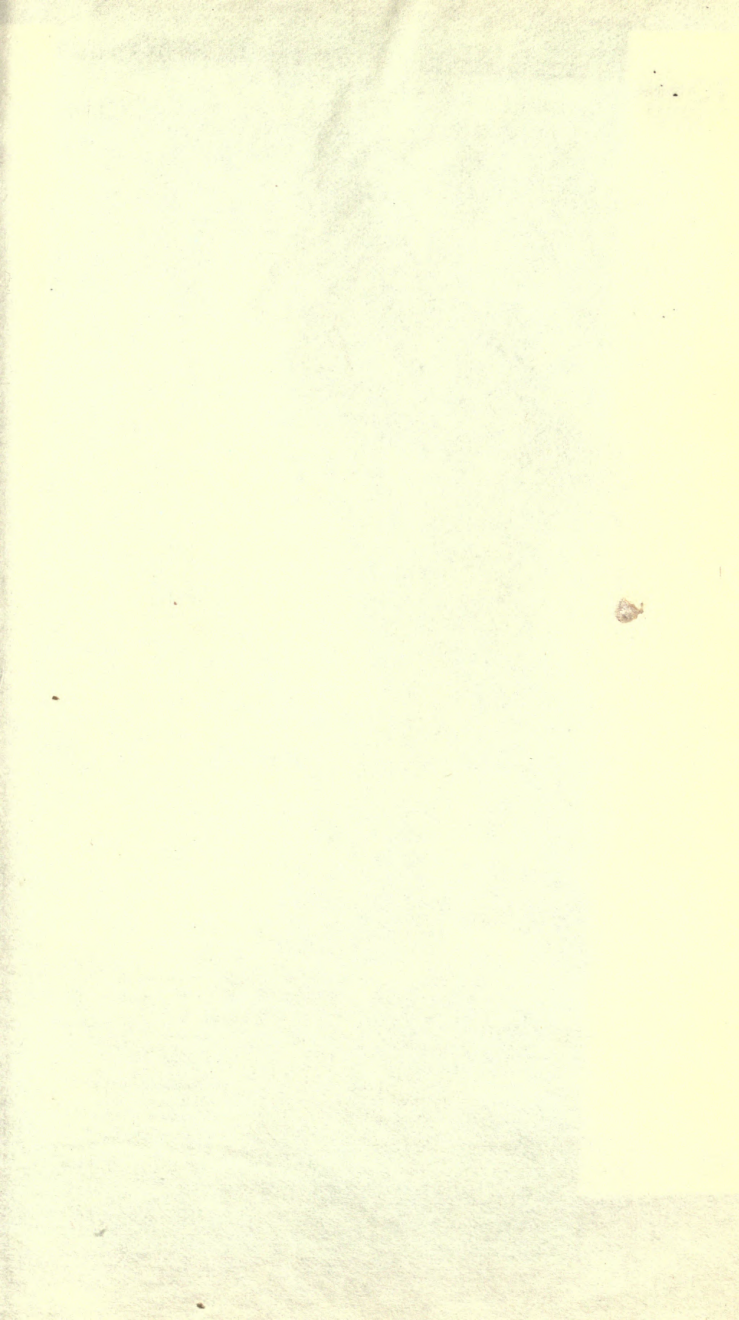












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